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Dear David

The Australasian Rail Authority proposal for an Exemption from the Disability Standards For Accessible Public Transport has been thoroughly reviewed. While agreement in principle is possible, much could be done to improve various proposed clauses. In particular, clear separation of new work from alteration of existing work is needed. Many proposals by ARA were quite reasonable 'unjustifiable hardship' solutions, but quite unsuitable for new facilities. Where disagreement with ARA proposals exists, an alternative solution is provided in this document. Unfortunately, no other process other than Exemption seems to offer opportunity to address difficulties arising from interpreting or meeting the requirements of the Transport Standards and therefore we are obliged to follow this process. Hopefully, the Guidelines associated with this document will benefit providers by providing clarity prior to the 2007 compliance review. There will be clear solutions and no excuse for non-compliance. If ARA have difficulties or objections to the proposals it would be useful for them to be involved in a broad consultation such as occurred for the TGS1 and Rail platform Exemption.

There is an understandable concern in the disability sector that the Standards are being irretrievably eroded by the ARA proposals. It must be stressed that the five-year review should have the existing Transport Standard as its starting point rather than the unjustifiable hardship solutions in the document below.

John Mac Pherson

# **Alternate Solutions and Guidelines to the ARA Version of Disability Standards for Accessible Public Transport**

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# Part 1 Preliminary

## Division 1.2 Meaning of important terms

### Original Clause

#### 1.9 Access path

An *access path* is a path that permits independent travel for all passengers within public transport premises, infrastructure or conveyances.

### Alternate Solution

#### 1.9 Access path

An *access path* is a path that permits independent travel for all passengers within public transport premises, infrastructure or conveyances. An access path may include a compliant walkway, ramp or lift.

An *access path* on a rail conveyance is a path from the external passenger doorway to the allocated space, priority seats and other facilities accessible to passengers with disabilities.

An *access path* on an existing railway station is a clear and unobstructed path from a nominated boundary point to a nominated accessible *boarding point* on each platform and to all accessible facilities (note Guidelines for implementation. On new railway Stations all public paths of travel should comply with these Standards.

### Guideline Entry

New facilities should comply fully with the existing Transport Standards. The revised clause gives a functional outcome for existing platforms. At least one access path leads to all facilities required to accessible. If implemented intelligently this would give equitable use of the transport system, rather than equitable use of the transport facilities.

The nominated boundary point should be either the principal or most popular entrance. A minor access point lacking parking or drop off facilities (if these are available at other entrances) would be unsuitable and discriminatory.

All paths on new stations can usually be constructed to a compliant standard. This should be stated. It is accepted that at existing stations this will sometimes be difficult or impossible. This can also be stated. The Guidelines are probably the best location for this type of 'guidance' information.

## New Clause (Exemption) – Replaces Clause 1.23

### 1.11AX Assistance Dog

- (1) An assistance dog, is a dog that is registered and trained to alleviate the effects of a person's disability on public transport.
- (2) An assistance dog must be under the direct control of the person with the disability at all times and wear a recognised form of identification as a trained assistance dog.
- (3) The handler is solely responsible for the conduct, care, feeding, hygiene and toileting of their animal.

### Alternate Solution

### 1.11AX Assistance Dog

- (4) An assistance animal, is an animal that is registered and trained to alleviate the effects of a person's disability on public transport.
- (5) An assistance animal must be under the direct control of the person with the disability at all times and wear a recognised form of identification as a trained assistance animal.
- (6) The handler is solely responsible for the conduct, care, feeding, hygiene and toileting of their animal.

### Guideline Entry

There is a need to separate 'working' from 'companion/comfort' animals. Dogs are the most common 'assistance animals' but other animals (trained and registered) may be needed where people are not compatible with, or have religious aversion to, dogs.

## New Clause (Exemption)

### 1.11BX Boarding Point

A **boarding point** is the place where passengers board a public transport conveyance.

### Alternate Solution

### 1.11BX Boarding Point

A railway station **Boarding point** is the immediate designated point from which passengers board a rail carriage.

## New Clause (Exemption)

### 1.11CX Booked services on trains

**Booked services on trains** are long distance passenger train services where prior booking is required to purchase a specific seat and/or allocated space.

## New Clause (Exemption)

### 1.11DX Unbooked services on trains

**Unbooked services on trains** are generally suburban passenger train services where no seat is booked or reserved for a specific person.

## New Clause (Exemption)

### 1.15X Disability aid

A *disability aid* is a device designed to be used by a person with a disability to alleviate the effects of that disability.

Disability aids include personal mobility, sensory and medical devices, but do not include devices designed for use by more than one person at the one time nor those that are primarily designed for use as transportation vehicles.

Constraints that are part of providing safe and effective public transport services and operations may limit the types of aids that can be accommodated on transport services, premises and infrastructure.

Passengers are responsible for the supply, assembly and operation of their disability aids at all times while using public transport services / facilities.

## Alternate Solution

### 1.15X Disability aid

A *disability aid* is a device designed to be used by a person with a disability to alleviate the effects of that disability.

Disability Aids are distinct from mobility aids.

Disability aids include sensory and medical devices, but do not include devices designed for use by more than one person at the one time nor those that are primarily designed for use as transportation vehicles.

Constraints that are part of providing safe and effective public transport services and operations may limit the types of aids that can be accommodated on transport services, premises and infrastructure.

Passengers on rail conveyances are responsible for the supply, assembly and operation of their disability aids at all times.

### Guideline Entry

Devices carrying more than one person, or devices that are essentially vehicles rather than a personal aid essential to alleviate a disability, are not suitable and often not safe on trains and stations.

For the occupational health and safety of both passenger and crew, train crew are unable to assist with the assembly or disassembly of disability aids. Staff on booked services are able to assist by folding a manual wheelchair for a passenger wanting to transfer to a seat and store the chair with the passenger in the seating / sleeping compartment, however they are unable to take aids apart for storage.

### Original Clause

#### 1.18 Infrastructure

- (1) **Infrastructure** is any structure or facility that is used by passengers in conjunction with travelling on a public transport service.
- (2) **Infrastructure** does not include any area beyond immediate boarding points (for example, bus stops, wharves, ranks, rail stations, terminals).

#### Revised Clause (Exemption)

#### 1.18 Infrastructure

- (1) **Infrastructure** is any structure or facility that is used by passengers to gain direct access to a public transport service. Infrastructure includes boarding points, footbridges, open railway platforms and open shelters.
- (2) **Infrastructure** does not include any area beyond immediate boarding points.

## Alternate Solution

### 1.18 Infrastructure

- (1) **Infrastructure** is any structure or facility that is needed by passengers in order to use a public transport service. Rail Infrastructure includes boarding points, footbridges, open railway platforms and open shelters.
- (2) **Infrastructure** does not include any area beyond immediate boarding points.
- (3) **Infrastructure** for other transport modes for example, bus stops, wharves, ranks, terminals and such are not the responsibility of the rail provider unless they formally accept responsibility from the other providers.

## New Clause (Exemption)

### 1.18X Level crossing

A level crossing is any vehicular and/or pedestrian crossing of a railway corridor at grade, as defined in AS1742.7.

## Alternate Solution

### 1.18X Level crossing

A level crossing is any vehicular and/or pedestrian crossing of a railway corridor at grade.

### Guidelines

While Australian Standards are relevant to the Transport Standards, they are not always acceptable to the disability sector. In particular, a solution to the barrier posed by flangeway gaps needs to be developed. Acceptance of the AS1742.7 Standard would see flangeway gaps institutionalised rather than addressed.

### 1.19 Manoeuvring areas

A **manoeuvring area** is a space in which a wheelchair or similar mobility aid is able to turn.

## **New Clause (Exemption)**

### **1.19AX Mobility aid**

- (1) A mobility aid is a disability aid that is designed to be used by one person with a disability to alleviate the effects of their limited mobility.
- (2) Mobility aids include wheelchairs and motorised scooters but do not include those devices that are primarily designed for use as transport or recreational vehicles.
- (3) A mobility aid for use on public transport services, premises and infrastructure must meet the requirements of Part 1X Mobility Aids.

## **Alternate Solution**

### **1.19AX Mobility aid**

- (1) A mobility aid is designed to be used by one person with a disability to alleviate the effects of their limited mobility.
- (2) Mobility aids include wheelchairs and motorised scooters walking frames, walking sticks, crutches and so on but do not include those devices that are primarily designed for use as transport or recreational vehicles.

## **Guideline Entry**

A mobility aid is an item that only directly assists with mobility (eg wheelchair, white cane, walking stick) while a disability aid might be an item that assists with the disability but is not directly involved with mobility (eg medication packs, oxygen bottles, security alarms, communication devices).

## **New Clause (Exemption)**

### **1.19BX Nominated accessible boarding point**

*A nominated accessible boarding point* is a boarding point nominated by the Provider for accessible boarding by people with disabilities to provide a coordinated and central location for providing direct assistance if necessary, and the provision of core facilities/services.

## Alternate Solution

### 1.19BX Nominated accessible boarding point

*A nominated accessible boarding point is a boarding point nominated by the Provider for accessible boarding by people with disabilities who require assistance in boarding. This allows a coordinated and central location for providing direct assistance if necessary, and location of core facilities/services in convenient proximity.*

## Original Clause

### 1.21 Premises

- (1) **Premises** are structures, buildings or attached facilities that an operator provides for passenger use as part of a public transport service.
- (2) **Premises** are a form of infrastructure.

### Revised Clause (Exemption)

### 1.21 Premises

- (1) **Premises** are structures, buildings or attached facilities that a **provider** supplies for passenger use as part of a public transport service.
- (2) **Premises** are a form of infrastructure.
- (3) **Premises** do not include footbridges, open railway platforms or open shelters, which are covered under 1.18 Infrastructure.

## Alternate Solution

### 1.21 Premises

- (1) **Premises** are structures, buildings or attached facilities that a **provider** supplies for passenger use as part of a public transport service.
- (2) **Premises** are distinct from infrastructure in that they have a building Classification in the Building Code of Australia.
- (3) **Premises** in the rail environment do not include footbridges, open railway platforms or open shelters, which are covered under 1.18 Infrastructure.

## New Clause (Exemption)

### 1.23X Sleeping berth

A sleeping berth is a sleeping space which may be in a compartment, or a seat/bed recliner chair in an open area.

## New Part (Exemption)

### Part 1X Mobility aids (new part)

#### 1X.1 Design Criteria

##### Maximum size

- (1) The maximum size of a mobility aid for use on public transport services, premises and infrastructure is less than 750mm wide by 1300mm long with a maximum head clearance height of 1500mm.
- (2) The front of the mobility aid shall be designed to meet the Figure 1X-X minimum knee and foot clearance beneath tables, counters and worktops.

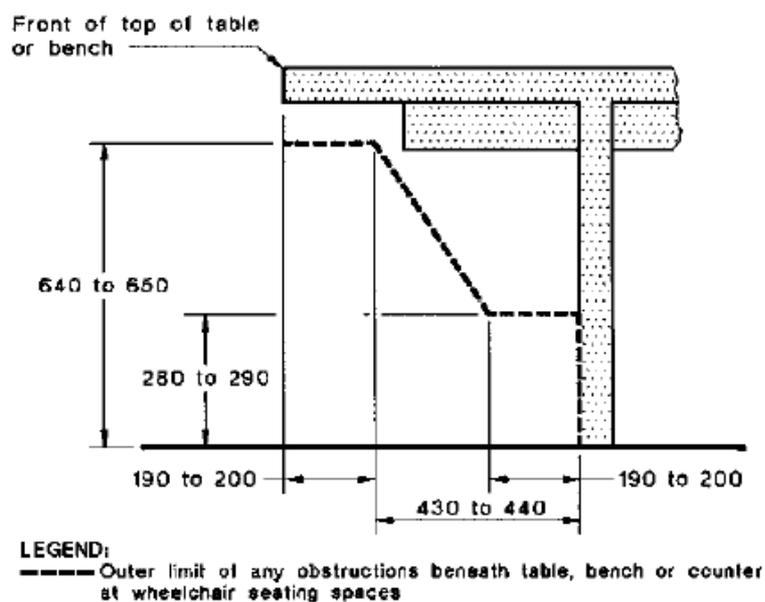


Figure 1X-X

### **Manoeuvrability**

- (3) The device must be able to turn through 180 degrees within an area of 2070 mm by 1540 mm.

### **Mass**

- (4) The combined mass of the passenger, the mobility aid, and any required assistant must be less than 300 kg.

## **Alternate Solution**

## **Part 1X Mobility aids (new part)**

### **1X.1 Design Criteria**

#### **Maximum size**

- (1) Mobility aid footprints must be of a size that can be accommodated in allocated spaces, and mobility aids must in certain limited situations in conveyances or on existing infrastructure or premises be able to pass through gaps of 750mm width.
- (2) To access tables, counters, worktops, wash basins or the like, users of mobility aids must be able to fit the knee clearance specifications of AS1428.1.

#### **Manoeuvrability**

- (3) The device must be able to turn through 180 degrees within an area of 2070 mm by 1540 mm in existing conveyances, infrastructure and premises, or 2270x 1740 mm in new conveyances, infrastructure and premises.

#### **Mass**

- (4) To access a boarding ramp, the combined mass of the passenger, the mobility aid, and any required assistant must be less than 300 kg.

### **Guideline Entry**

In certain limited locations mobility aids must be able to pass through restricted spaces down to 750mm wide (eg between bus wheel arches). Defining 750 mm width for the mobility aid is not acceptable. Minimum width for the mobility aid envelope (which includes occupant) must be 800 mm (AS1428.2 Clause 6). Since the Premises Standard will be based around the 1300 x 800 mm, and will incorporate parts of the Transport Standard in its

Part H, consistency regarding the envelope must be maintained between the two Standards.

It is accepted that scooter, walking frame and crutch users will use standard seating in dining and similar areas. Wheelchair users will need tables and allocated spaces to use dining and similar.

Weight restrictions are really only applicable to boarding ramps. A passenger may board by a means that does not entail a ramp or they may only access premises or infrastructure. In any of these instances mass is usually immaterial.

## Part 1X Mobility aids (new part continued)

### 1X.2 Performance criteria —

#### Braking

- (1) Mobility aids must have effective braking systems and passengers must apply the brakes while conveyances are in motion, and at other times as required for safe travel.

#### Anchoring

- (2) Mobility aids must comply with relevant safety requirements eg criteria for anchorage points.

#### Stability

- (3) Mobility aids must be stable under normal conveyance forces of acceleration, deceleration, cornering and pitching.

#### Propulsion

- (4) Internal or external combustion driven aids are not permitted on transport premises, infrastructure or conveyances.

#### Batteries

- (5) Electric mobility aids must comply with regulations governing the carriage of batteries on public transport. Batteries need to be adequately secured and contained. Gel or solid state options should be considered.

#### Wheels and Gaps

- (6) A mobility aid should be able to :
  - (a) cross a horizontal gap of 75 mm for pedestrian level crossings as defined in AS1742.7; and
  - (b) mount a vertical rise (bump) up to 20 mm; and
  - (c) cross grating gaps up to 13 mm wide and 150 mm long, and
  - (d) cross a horizontal gap up to 65 mm wide when combined with a vertical gap of up to 20 mm at station boarding points.

#### Ramps

- (7) Mobility aids should be able to negotiate:
  - (a) a 1 in 12 ramp unassisted; and

- (b) a 1 in 8 grade unassisted where the ramp is less than 1520 mm;  
and
- (c) a 1 in 4 ramp with assisted access.

## **Operation and storage**

Passengers are responsible for:

- (8) (a) any dis/assembly, operation and manoeuvrability of their disability aids into and out of public transport conveyances, premises and infrastructure
- (b) storage of their disability aids prior to and after travel on public transport services.

## **Working Environment**

- (9) The mobility aid must be able to operate safely in internal and external environments under varying ambient conditions.

## **Alternate Solution**

### **1X.2 Performance criteria —**

#### **Braking**

- (1) Mobility aids must have effective braking systems and passengers must apply the brakes while conveyances are in motion, and at other times as required for safe travel.

#### **Anchoring**

- (2) Mobility aids must comply with relevant safety requirements from surgical engineering industry standards. eg criteria for anchorage points.

#### **Stability**

- (3) Mobility aids must be stable under normal conveyance forces of acceleration, deceleration, cornering and pitching.

#### **Propulsion**

- (4) Internal or external combustion driven aids are not permitted on transport premises, infrastructure or conveyances.

#### **Batteries**

- (5) Electric mobility aids must comply with regulations governing the carriage of batteries on public transport. Batteries need to be adequately secured and contained. Gel or solid state options should be considered.

## **Wheels and Gaps**

- (6) A mobility aid should be able to :
- (a) cross a horizontal gap of 40 mm; and
  - (b) mount a vertical rise (bump) up to 15 mm; and
  - (c) cross grating gaps up to 13 mm wide and 150 mm long, and

## **Ramps**

- (7) Mobility aids should be able to negotiate:
- (a) a 1 in 14 ramp unassisted; and
  - (b) a 1 in 8 grade unassisted where the ramp is less than 1520 mm; and
  - (c) a 1 in 4 ramp with assisted access where the ramp is less than 1520 mm.

## **Operation and storage**

Rail passengers are responsible for:

- (8) (a) any dis/assembly and operation of their disability aids in rail conveyances, premises and infrastructure
- (b) Manoeuvring mobility aids into and out of the allocated space in a rail carriage.
  - (c) storage of their disability aids prior to and after travel on public transport services.

## **Working Environment**

- (9) The mobility aid must be able to operate safely in internal and external environments under varying ambient conditions.

## **Guideline**

The public transport environment frequently produces situations where the performance of mobility devices is not sufficient to overcome the access barriers produced by the legitimate constraints faced by transport providers. In the rail context, boarding points in particular present problems that can often only be overcome through direct assistance.

## **1X.3 Orientation**

Transport operators may determine the location and orientation of passengers on premises, infrastructure and conveyances.

<b>Conveyances</b> except dedicated school buses, and small aircraft	<b>Premises</b>	<b>Infrastructure</b> except airports that do not accept regular public transport services
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## Alternate Solution

### 1X.3 Orientation

In situations where passenger safety is a concern, transport operators may determine the location and orientation of passengers on premises, infrastructure and conveyances.

<b>Conveyances</b> except dedicated school buses, and small aircraft	<b>Premises</b>	<b>Infrastructure</b> except airports that do not accept regular public transport services
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## Part 2 Access paths

### Original Clause

#### 2.1 Unhindered passage

- (1) An access path that allows unhindered passage must be provided along a walkway, ramp or landing.
- (2) An access path must comply with **AS1428.2 (1992) Clause 8.1.**

<b>Premises</b>	<b>Infrastructure</b> except airports that do not accept regular public transport services
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## Revised Clause (Exemption)

### 2.1 Unhindered passage

- (1) An access path that allows unhindered passage to a boarding point must be provided. The **Provider** may nominate the access path.
- (2) An access path must comply with **AS1428.1 (2001)**, subject to Part 2.X and with the following exceptions and additions:
  - (a) Walkways, ramps and landings shall have an unobstructed width of not less than 1200 mm.
- (3) An access path must have a maximum crossfall of 1 in 40 except for 1:33 if the surface is a bituminous seal.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

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## Alternate Solution

### 2.1 Unhindered passage

- (1) An access path that allows unhindered passage must be provided along a walkway, ramp or landing.
- (2) On existing premises and infrastructure, where technical constraints do not permit compliance with Part 2.1(1) an access path that allows unhindered passage to a boarding point must be provided. The **Provider** may nominate the access path.
- (3) An access path must comply with **AS1428.1 (2001)**, subject to Part 2.X and with the following exceptions and additions:
  - (a) Walkways, ramps and landings shall have an unobstructed width of not less than 1200 mm.
- (4) An access path must have a maximum crossfall of 1 in 40 except for 1:33 if the surface is a bituminous seal.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

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## Guidelines

On new infrastructure and premises, access paths can usually be all accessible. Buildings covered by the Building Code of Australia will be required to do so. Existing structures can present legitimate problems to full compliance. In that a minimum of one access path to a boarding point provides a functional outcome, existing stations can function while in a non-compliant state. If a path of travel can be made accessible without unjustifiable hardship though, then this should occur. The concession on existing platforms would only be granted under situations of unjustifiable hardship. The entry point to platforms would need to be carefully considered and priority given to those that give 'best connection' with the surrounding pedestrian and transport environment.

## Original Clause

### 2.2 Continuous accessibility

An access path must comply with **AS1428.2 (1992) Clause 7**, *Continuous accessible path of travel*.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

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## Revised Clause (Exemption)

### 2.2 Continuous accessibility

An access path shall be provided as follows:

- (1) Accessible paths of travel within the boundary of the site shall be provided from transportation stops, accessible parking and accessible passenger loading zones, and accessible public streets or walkways to the accessible building entrance they serve.
- (2) Accessible paths of travel shall connect accessible buildings, facilities, and spaces that are on the same site.
- (3) Accessible paths of travel shall connect accessible building entrances with all accessible spaces and facilities within a building.
- (4) Accessible paths of travel shall connect accessible entrances of each accessible building with those exterior and interior spaces and facilities that serve it.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

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**Alternate Solution**

**2.2 Continuous accessibility**

An access path shall be provided as follows:

- (1) Accessible paths of travel within the boundary of the site shall be provided from transportation stops, accessible parking and accessible passenger loading zones, and accessible public streets or walkways to the accessible building entrance they serve.
- (2) Accessible paths of travel shall connect accessible buildings, facilities, and spaces that are on the same site, and shall be constructed to minimise travel distance between accessible facilities.
- (3) Accessible paths of travel shall connect accessible building entrances with all accessible spaces and facilities within a building.
- (4) Accessible paths of travel shall connect accessible entrances of each accessible building with those exterior and interior spaces and facilities that serve it.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

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**Guidelines**

Fatigue caused by unnecessarily long paths of travel is a significant barrier to the use of the built environment for many people. In the design of new facilities and the refurbishment of existing facilities every effort must be made to minimise the length of the access paths between entrances, boarding points and other accessible facilities.

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## Original Clause

### 2.4 Minimum unobstructed width

- (1) The minimum unobstructed width of an access path must be 1200 mm (**AS1428.2 (1992) Clause 6.4**, *Width of path of travel*).
- (2) However, the minimum unobstructed width of a moving footway may be 850 mm.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

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## Revised Clause (Exemption - see added clause 2.4X)

### 2.4 Minimum unobstructed width

- (1) The minimum unobstructed width of an access path must be 1200 mm. For doorways and gateways see relevant clauses.
- (2) However, the minimum unobstructed width of a moving footway may be 850 mm.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

**except railway  
platforms**

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## Alternate Solution

### 2.4 Minimum unobstructed width

- (1) The minimum unobstructed width of an access path must be 1200 mm. For doorways and gateways see relevant clauses.
- (2) However, the minimum unobstructed width of a moving footway may be 850 mm.

#### Premises

#### Infrastructure

except  
airports that do  
not accept  
regular public  
transport  
services

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## Guidelines

Existing infrastructure and premises may not be able to meet the 1200 mm minimum width for access paths in all locations due to technical constraints. In these situations a path of >1000 mm width should be provided. If the access path stricture is of a very limited nature (eg access around a power pole or column) a minimum of 850 mm width should be acceptable. Alternate paths of travel should be provided if access path strictures are of an extended nature (eg over several metres).

### New Clause (HREOC Outcome)

#### 2.4X Minimum unobstructed width for railway platforms

Width of an access path at railway stations must comply with the following:

##### (1) New platforms

New platforms must comply with Part 2.4.

##### (2) Existing stations and platforms

Existing stations and platforms must be brought into compliance with these Standards to the maximum extent possible.

Fittings and fixtures (bins, seats, vending machines) must be relocated to the extent possible to achieve maximum compliance.

Requirements for warning TGSIs to be installed on platform edges may compromise clear access paths in some circumstances as indicated below.

**(3) Site constraints preventing fully compliant paths of travel**

Clear access path width may be reduced from 1200mm to 1000mm where site constraints or fixed structures preclude full compliance. This includes new structures constructed within existing site constraints.

**(4) Existing platforms - exceptionally severe site constraints**

Where an access path width of 1000mm cannot be achieved adjacent to the 600mm warning TGSIs then compliance must be maximized by a range of options, which may include:

- (a) Equivalent access by maintaining an access path of 1000mm (minimum) to at least one side of an obstacle.
- (b) Providing an access path of 1000mm (min) to a nominated accessible boarding point and equivalent access to essential facilities on the platform.

**(5) Using platform edge warning TGSIs as part of the access path**

Where 1000mm clear access path cannot be achieved by the options outlined above, warning TGSIs may form part of the access path (for example where power stanchions or other fixed structures on platforms need to be passed). The overlap of warning TGSIs and access paths must be minimized.

**(6) Information to passengers**

Where stations do not have a clear access path width of 1000mm, operators should provide passengers with information (including at stations and through internet sites and other appropriate information methods) detailing access features provided.

**(7) Moving footways**

The minimum unobstructed width of a moving footway may be 850 mm.

## Guidelines

Warning TGSIs are an important safety feature for people who have vision impairments. Their use on platform edges in the United States has greatly reduced the number of falling accidents involving blind passengers. They introduce a level of difficulty for many people who have mobility impairments though, and could not therefore be seen as a legitimate part of an access path. Every attempt to keep access paths clear of TGSIs must be made, but not at the expense of the safety of blind passengers.

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## Original Clause

### 2.5 Poles and obstacles, etc

- (1) Poles, columns, stanchions, bollards and fixtures must not project into an access path.
- (2) Obstacles that abut an access path must have a luminance contrast with a background of not less than 30%.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

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## Revised Clause (Exemption)

### 2.5 Poles and obstacles, etc

- (1) Poles, columns, stanchions, bollards and fixtures must not project into an access path, except as provided for in Part 2.4X.
- (2) Obstacles that abut an access path must have a colour contrast with the background.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

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## 2.5 Poles and obstacles, etc

- (1) Poles, columns, stanchions, bollards and fixtures must not project into an access path, except as provided for in Part 2.4X.
- (2) Obstacles that abut an access path must have a colour contrast with the background.

### Premises

### Infrastructure

except airports that do not accept regular public transport services

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## Alternate Solution

## 2.5 Poles and obstacles, etc

- (1) Poles, columns, stanchions, bollards and fixtures must not project into an access path, except as provided for in Part 2.4X.
- (2) Obstacles that abut an access path must have a distinct colour contrast with the background.

### Premises

### Infrastructure

except airports that do not accept regular public transport services

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## Guidelines

While colour contrast is easily determined subjectively it is most important to emphasise a distinct or strong colour contrast with the background. Luminance contrast fails to consistently produce a visual contrast between surfaces (from field experience).

## New Clause (Exemption)

## 2.5AX Level Crossings

If a public pedestrian level crossing is used as a direct access path to a boarding point it shall comply with AS1742.7 Pedestrian Level Crossings.

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## Alternate Solution

### 2.5AX Level Crossings

If a public pedestrian level crossing is used as a direct access path to a boarding point it shall, so far as is technically possible, comply with the requirements for an access path.

## Guidelines

A level crossing has elements, such as flangeway gaps, that can not at this time be made accessible. These will remain under 'unjustifiable hardship' provisions until a technical solution is devised.

## Original Clause

### 2.6 Access paths — conveyances

- (1) Subject to subsection (3) and section 2.7, an access path that allows continuous and unhindered passage must be provided with a minimum width of at least 850 mm.
- (2) Subsection (1) applies to doorways and stairs, and between entrances, exits, allocated spaces and other essential facilities for passengers using wheelchairs and other mobility aids.
- (3) If the conveyance exists or is ordered before the commencement of this section, the minimum width may be reduced to 800 mm at any doorway restriction.

#### Conveyances

- Buses
  - Ferries
  - Trains
  - Trams
  - Light rail
-

## Revised Clause (Exemption)

### 2.6 Access paths — conveyances

(1) Subject to subsection (2) and sections 2.7 and 2.8. a clear access path with a width of 850 mm, except where design constraints require local restriction to a minimum of 750 mm,, is required extending from the entrance doorway to the allocated spaces, priority seats and other essential facilities for passengers with mobility aids.

(2) If the conveyance exists or is ordered before 2 April 2004, the minimum width may be reduced to 750 mm at any doorway restriction.

(3) Some sections of a conveyance may not be available to all passengers.

#### Conveyances

- Buses
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Alternate Solution

### 2.6 Access paths — conveyances

(1) In new conveyances, subject to subsection (2) and sections 2.7 and 2.8. a clear access path with a width of 850 mm, except where design constraints require local restriction to a minimum of 750 mm, is required extending from the entrance doorway to the allocated spaces, priority seats and other essential facilities for passengers with mobility aids.

(2) If the conveyance exists or is ordered before 2 April 2004, the minimum width may be reduced to 800 mm at any doorway restriction.

(3) Some sections of a conveyance may not be available to all passengers who use mobility aids.

## Conveyances

- Buses
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Guidelines

Not all people with disabilities have mobility restrictions. For example, blind or low vision passengers may use stairs. As such elements that make access paths safe, such as colour contrasting strips on the nose of the stair tread, shall be used.

A moving mobility device has a larger footprint than one that is stationary. 850 mm is reasonable and if it can be achieved it should be.

---

## Original Clause

### 2.8 Extent of path

- (1) An access path must extend from the entrance of a conveyance to the facilities or designated spaces provided for passengers with disabilities.
- (2) Up to 50 mm of an adjacent allocated space may be used as part of the access path.
- (3) If an access path cannot be provided, the operator must provide equivalent access by direct assistance.

## Conveyances

- Buses
  - Ferries
  - Trains
  - Trams
  - Light rail
-

## Revised Clause (Exemption)

### 2.8 Extent of path

- (1) An access path must extend from the entrance of a conveyance to the allocated spaces, priority seats and other essential facilities for passengers with mobility aids and people with vision impairment using canes and assistance dogs.
- (2) Up to 50 mm of an adjacent allocated space may be used as part of the access path.
- (3) If an access path cannot be provided, the operator must provide equivalent access by direct assistance.
- (4) When allocated spaces adjacent to an access path are occupied, some manoeuvring by people in the allocated spaces may be required to achieve a clear access path.
- (5) An access path need not extend through an area with hearing augmentation.

#### Conveyances

- Buses
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Alternate Solution

### 2.8 Extent of path

- (1) An access path must extend from the entrance of a conveyance to the allocated spaces, priority seats and other essential facilities for passengers with disabilities.
- (2) Up to 50 mm of an adjacent allocated space may be used as part of the access path.
- (3) If an access path cannot be provided, the operator must provide equivalent access by direct assistance.
- (4) When allocated spaces adjacent to an access path are occupied, some manoeuvring by people in the allocated spaces may be required to achieve a clear access path.
- (5) An access path need not extend through an area with hearing augmentation.

## Conveyances

- Buses
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

### Guidelines

Though access paths need not extend through areas of hearing augmentation, the need for people who are deaf or hearing impaired to receive essential information is undiminished. Equivalent Access solutions will be needed for these people.

## Part 3 Manoeuvring areas

### Original Clause

#### 3.1 Circulation space for wheelchairs to turn in

A manoeuvring area must comply with **AS1428.2 (1992) Clause 6.2**, *Circulation space for a 180 degree wheelchair turn*.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Revised Clause (Exemption)

### 3.1 Circulation space for mobility aids to turn in

A manoeuvring area must allow for a mobility aid to make an 180° turn. Where possible, the space required for a mobility aid to make an 180° turn shall be no less than 2070mm in the direction of travel and not less than 1540mm wide.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Alternate Solution

### 3.1 Circulation space for mobility aids to turn in

A manoeuvring area must allow for a mobility aid to make an 180° turn. On new infrastructure and premises a space of 2270 mm in the direction of travel and 1740 mm wide shall be provided. On existing premises, where this is not possible for technical reasons, a space no less than 2070mm in the direction of travel and not less than 1540mm wide shall be provided.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Guideline

It is accepted that existing premises and infrastructure may have space constraints that prevent the use of the enhanced requirements for a 180 degree turn. However, where they can comply with the enhanced dimensions they should.

## Original Clause

### 4.2 Two-way access paths and aerobridges

- (1) A passing area must be provided at least every 6 metres along any two-way access path that is less than 1800 mm wide (**AS1428.2 (1992) Clause 6.5 (b)**, *Passing space for wheelchairs* and **Figure 3**).
- (2) A passing area is not required on an aerobridge.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Revised Clause (Exemption)

### 4.2 Two-way access paths and aerobridges

1. Where a path of travel is less than 1800mm wide, passing areas at intervals of not more than 9 metres shall be provided as follows:
  - (a) On one side of the path of travel – the passing area shall not be less than 1600mm long and 1800mm wide.
  - (b) With space distributed equally on both sides of the path of travel – the passing area shall be not less than 2000mm long and 1800 mm wide.
2. A passing area is not required on an aerobridge.
3. For sections of railway stations covered by Part 2.4X, no passing areas are required.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Alternate Solution

### 4.2 Two-way access paths and aerobridges

1. Where an access path is less than 1800mm wide, passing areas at intervals of not more than 9 metres shall be provided as follows:
  - (a) On one side of the path of travel – the passing area shall not be less than 1600mm long and 1800mm wide.

- (b) With space distributed equally on both sides of the path of travel – the passing area shall be not less than 2000mm long and 1800 mm wide.
2. A passing area is not required on an aerobridge.
  3. For sections of existing railway stations covered by Part 2.4X, no passing areas are required.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

---

**Guidelines**

The HREOC outcome in Part 2.4x did not dispense with passing spaces. Rather, it acknowledged strictures along access paths on existing platforms. Where passing spaces can be provided they should be.

**Original Clause**

**4.3 Passing areas — conveyances**

- (1) A ferry designed to carry more than 1 wheelchair must include at least 1 passing area for each accessible deck.
- (2) A train designed to carry more than 1 wheelchair must include at least 1 passing area for each accessible rail car.
- (3) The passing area must enable passengers travelling in mobility aids (conforming with the assumptions indicated in Part 40.1 of the Guidelines) to pass each other.
- (4) The passing area may comprise part of the allocated space or circulation space or both.

**Conveyances**

- Ferries
  - Trains
- 

**Revised Clause (Exemption)**

**4.3 Passing areas — conveyances**

- (1) A ferry designed to carry more than 1 wheel chair must include at least 1 passing area for each accessible deck.
- (2) Each accessible rail car designed to carry more than 1 mobility aid must include at least 1 passing area.

- (3) The passing area must enable passengers travelling in mobility aids (conforming with Part 1X Mobility Aids and the assumptions indicated in Part 40.1 of the Guidelines) to pass each other.
- (4) The passing area may comprise part of the allocated space or circulation space or both.
- (5) Turn taking is an acceptable practice to allow mobility aids to pass.

#### **Conveyances**

- Ferries
  - Accessible rail car
- 

### **Alternate Solution**

#### **Passing areas — conveyances**

- (1) A ferry designed to carry more than 1 wheel chair must include at least 1 passing area for each accessible deck.
- (2) Each accessible rail car designed to carry more than 1 mobility aid must include at least 1 passing area.
- (3) The passing area must enable passengers travelling in mobility aids (conforming with the assumptions indicated in Part 40.1 of the Guidelines) to pass each other.
- (4) The passing area may comprise part of the allocated space or circulation space or both.
- (5) Turn taking is an acceptable practice to allow mobility aids to pass.

#### **Conveyances**

- Ferries
  - Accessible rail car
- 

#### **Guideline**

It is reasonable to expect that all passengers will be cooperative and helpful in ensuring that other passengers are able to use the transport service.

## Part 5 Resting points

### Original Clause

#### 5.1 When resting points must be provided

- (1) There must be resting points for passengers along an access path if the walking distance between facilities or services exceeds 60 metres (**AS1428.2 (1992) Note to Clause 7**, *Continuous accessible path of travel*).
- (2) A resting point must provide seats (**AS1428.2 (1992) Clause 27.1(a)**, *Street Furniture*).

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

### Revised Clause (Exemption)

#### 5.1 When resting points must be provided

- (1) There must be resting points for passengers along an access path if the walking distance between facilities or services exceeds 60 metres.
- (2) Where major site restraints do not allow for resting points as required, these shall be provided in locations where the infrastructure permits.
- (3) A resting point must provide seating for a minimum of two people and at least one space for a mobility aid. Seats shall be a minimum of 500 mm away from the path of travel.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Alternate Solution

### 5.1 When resting points must be provided

- (1) There must be resting points for passengers along an access path if the walking distance between facilities or services exceeds 60 metres.
- (2) For existing premises or infrastructure, where major site restraints do not allow for resting points as required, these shall be provided in locations where the infrastructure permits.
- (3) A resting point must provide seating for a minimum of two people and at least one space for a mobility aid. Seats shall be a minimum of 500 mm away from the path of travel.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

### Guidelines

New platforms can be designed to comply fully with the existing Parts 5.1(1) and (3). For existing premises and infrastructure full compliance shall be achieved wherever possible. Non compliant outcomes for existing premises and infrastructure, where technical constraints prevent full compliance, should be negotiated with affected users.

## Part 6 Ramps

### Original Clause

#### 6.1 Ramps on access paths

A ramp on an access path must comply with **AS1428.2 (1992) Clause 8**.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

## Revised Clause (Exemption)

### 6.1 Ramps on access paths

A ramp on an access path must comply with **AS1428.1 (2001)** and;

- 1) In outdoor conditions, ramps on access paths shall be designed so that water does not accumulate on surfaces. (For requirements for ground surfaces, see **AS1428.2(1992) Clause 9.**)
- 2) Kerb ramps shall comply with the requirements set out in the **AS1428.1 (2001)**.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Alternate Solution

### 6.1 Ramps on access paths

A ramp on an access path must comply with **AS1428.1** and;

- 1) In outdoor conditions, ramps on access paths shall be designed so that water does not accumulate on surfaces. (For requirements for ground surfaces, see **AS1428.2(1992) Clause 9.**)
- 2) Be not less than 1200 mm between handrails.
- 3) Kerb ramps shall comply with the requirements set out in the **AS1428.1**.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Guidelines

As the use of a current Australian Standard will seldom deliver a diminished access outcome from that required by a redundant version, use of the current version of AS1428.1 is advised.

## Original Clause

### 6.2 Boarding ramps

A boarding ramp must comply with **AS3856.1 (1998) Clause 2.1.8 (b), (c), (f) and (g)**.

**Conveyances**

except dedicated  
school buses and  
small aircraft

---

**Revised Clause (Exemption)**

**6.2 Boarding ramps**

- (1) When two or more ramps are deployed, they shall be attached securely to one another.
- (2) The surface of the ramp shall have a slip-resistant finish. The surface shall be an acceptable surface when tested in accordance with AS3698.13. Cleats may be provided to assist an attendant using the ramp.
- (3) A ramp shall have no protrusions extending for more than 6 mm above the surface except cleats or side edge barriers.
- (4) When the ramp is deployed, there shall be no opening or gap in the ramp more than 40 mm.

**Conveyances**

except dedicated  
school buses and  
small aircraft

---

---

**Original Clause**

**6.3 Minimum allowable width**

The minimum allowable width of a ramp is 800 mm.

**Conveyances**

except dedicated  
school buses and  
small aircraft

---

## Revised Clause (Exemption)

### 6.3 Minimum allowable width

Ramps shall have a minimum trafficable width of 750 mm.

#### Conveyances

except dedicated  
school buses and  
small aircraft

---

## Alternate Solution

### 6.3 Minimum allowable width

Ramps shall have a minimum trafficable width of 800 mm.

#### Conveyances

except dedicated  
school buses and  
small aircraft

---

## Guidelines

By implication, mobility aids of >750 mm width may not be able to use all boarding ramps. The minimum nature of this 800 mm dimension must be emphasised. If it can be exceed it should be.

## Part 8 Boarding

### Original Clause

#### 8.1 Boarding points and kerbs

- (1) Operators and providers may assume that passengers will board at a point that has a firm and level surface to which a boarding device can be deployed.
- (2) If a kerb is installed, it must be at least 150 mm higher than the road surface.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

## Revised Clause (Exemption)

### 8.1 Boarding points and kerbs

- (1) Operators and providers may assume that passengers will board at a point that has a firm and level surface to which a boarding device can be deployed.
- (2) If a kerb is installed, it must be at least 150 mm higher than the road surface.
- (3) The **Provider** may nominate a single accessible location for boarding of a conveyance.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

### Guidelines

Nominated boarding points are for people who require assistance to board a conveyance. People who board independently may wish to board at a point convenient to themselves.

---

## Original Clause

### 8.2 When boarding devices must be provided

- (1) A manual or power assisted boarding device must be available at any accessible entrance to a conveyance that has:
  - (a) a vertical rise or gap exceeding 12 mm (**AS3856.1 (1998) Clause 2.1.7 (f)**); or
  - (b) a horizontal gap exceeding 40 mm (**AS3856.1 (1998) Clause 2.1.8 (g)**).

#### Conveyances

except dedicated school buses and small aircraft

---

## Revised Clause (Exemption)

### 8.2 When boarding devices must be provided

- (1) A manual or power assisted boarding device must be available at any accessible entrance to a conveyance that has:
  - (a) a vertical rise or gap exceeding 20 mm; or
  - (b) a horizontal gap exceeding 65 mm

#### Conveyances

except dedicated school buses and small aircraft

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Alternate Solution

### 8.2 When boarding devices must be provided

- (1) A manual or power assisted boarding device must be available at any accessible entrance to a conveyance that has:
  - (a) a vertical rise or gap exceeding 12 mm; or
  - (b) a horizontal gap exceeding 40 mm

#### Conveyances

except dedicated school buses and small aircraft

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Guidelines

Realistic gap dimensions that allow the passage of conveyances are unavoidable. When the gap maxima of Part 8.2 are exceeded then direct assistance, typically by deploying a boarding ramp, must be provided.

## Original Clause

### 8.6 Maximum load to be supported by boarding device

- (1) A boarding device must be able to support a total passenger and mobility aid weight of up to 300 kg.
- (2) The device must be clearly labelled with the maximum load that it can carry, both on the boarding device and next to the accessible entrance on the outside of the conveyance.

### Conveyances

except dedicated  
school buses and  
small aircraft

---

## Revised Clause (Exemption)

### 8.6 Maximum load to be supported by boarding device

- (1) A boarding device must be able to support the combined mass of the passenger, mobility aid and any assistant up to a total of 300 kg.
- (2) The device must be clearly labelled with the maximum load that it can carry.

### Conveyances

except dedicated  
school buses and  
small aircraft

---

### Guidelines

The assistant is only included in the mass restriction if they are on the boarding ramp simultaneously with the passenger and their mobility aid.

## Original Clause

### 8.7 Signals requesting use of boarding device

- (1) Any signal for requesting the deployment of a boarding device must be located in an allocated space.
- (2) If possible, a signal is to be placed according to the dimensions given in **AS1428.2 (1992) Clause 11.4, Call buttons.**

### Conveyances

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
-

## Guidelines

The capacity to request a boarding device from the allocated space is most important. Passengers may not have time to reach the entrance before the train pulled out. Alerting staff from the allocated space buys time and certainty in the process of alighting. It is anticipated that movement towards the entrance would not begin until the train was stationary. Progress may be slowed through crowding by other passengers, inappropriately stored baggage or the person's disability. Location of the call button in the allocated space ensures consistently being able to alert staff of the need for an access ramp or similar.

## Original Clause

### 8.8 Notification by passenger of need for boarding device

- (1) It must be possible for a passenger to notify the operator of a conveyance that he or she needs a boarding device to board or alight from a conveyance
- (2) If a request signal device is used, it may be located on the conveyance or at the boarding point according to the dimensions given in **AS1428.2 (1992) Clause 11.4, Call buttons.**

Conveyances	Premises	Infrastructure
<ul style="list-style-type: none"><li>• Buses except dedicated school buses</li><li>• Coaches</li><li>• Ferries</li><li>• Trains</li><li>• Trams</li><li>• Light rail</li></ul>		except airports that do not accept regular public transport services

---

### Revised Clause (Exemption)

### 8.8 Notification by passenger of need for boarding device

- (1) It must be possible for a passenger to notify the operator of a conveyance that he or she needs a boarding device to board or alight from a conveyance.
- (2) If a request signal device is used, it may be located on the conveyance or at the nominated accessible boarding point.
- (3) Any signal for requesting the deployment of a boarding device on a conveyance must be located in or near an allocated space or at an entrance.

- (4) Where possible, call buttons at entrances shall be located not less than 550 mm and not more than 1200 mm above the finished floor and not less than 500mm from an internal corner.
- (5) Operators may provide equivalent access by direct assistance.

<b>Conveyances</b>	<b>Premises</b>	<b>Infrastructure</b>
<ul style="list-style-type: none"> <li>• Buses except dedicated school buses</li> <li>• Coaches</li> <li>• Ferries</li> <li>• Trains</li> <li>• Trams</li> <li>• Light rail</li> </ul>		except airports that do not accept regular public transport services

## **Alternate Solution**

### **8.8 Notification by passenger of need for boarding device**

- (1) It must be possible for a passenger to notify the operator of a conveyance that he or she needs a boarding device to board or alight from a conveyance.
- (2) If a request signal device is used, it may be located on the conveyance or at the nominated accessible boarding point.
- (3) Any signal for requesting the deployment of a boarding device on a conveyance must be located in or near an allocated space.
- (4) Where possible, call buttons at entrances shall be located not less than 550 mm and not more than 1200 mm above the finished floor and not less than 500mm from an internal corner.
- (5) Operators may provide equivalent access by direct assistance.

<b>Conveyances</b>	<b>Premises</b>	<b>Infrastructure</b>
<ul style="list-style-type: none"> <li>• Buses except dedicated school buses</li> <li>• Coaches</li> <li>• Ferries</li> <li>• Trains</li> <li>• Trams</li> <li>• Light rail</li> </ul>		except airports that do not accept regular public transport services

## Guidelines

Location of call buttons near an entrance introduces difficulties in crowded conveyances. It is best to keep the request signal device accessibly located in or near an allocated space.

If a signal device is located only at the boarding point but not the allocated space, passengers on the conveyance allocated space will be unable to request assistance. Ideally requests should be possible from both the boarding point and conveyance.

It is accepted that design and space constraints exist in conveyances. However, Clause 22.4 and Figure 23 of AS1428.2 are not the appropriate references for location of call buttons to be used by a person sitting in an allocated space in their own mobility aid or on a folding seat. This Clause and Figure define a common zone of reach for people seated or standing. Rather, Clause 11.4 of AS1428.2 is appropriate for seated people who need to operate call buttons. Should compliance not be possible due to genuine constraints, equivalent access provisions apply.

## Part 9 Allocated space

### Original Clause

#### 9.1 Minimum size for allocated space

The minimum allocated space for a single wheelchair or similar mobility aid is 800 mm by 1300 mm (**AS1428.2 (1992) Clause 6.1**, *Clear floor or ground space for a stationary wheelchair*).

#### Conveyances

except dedicated  
school buses and  
small aircraft

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

## Revised Clause (Exemption)

### 9.1 Minimum size for allocated space

(1) The minimum allocated space (minimum clear floor or ground space, including knee space under objects as in Figure 1X-X) for a single mobility aid and occupant is 800 mm wide by 1300 mm long and 1500 mm high.

(2) Transport operators may determine the location and orientation of allocated spaces in conveyances.

(3) Mobility aid users may not be able to enter or exit an allocated space in a single manoeuvre, given the internal configurations of a conveyance.

<b>Conveyances</b>	<b>Premises</b>	<b>Infrastructure</b>
except dedicated school buses and small aircraft		except airports that do not accept regular public transport services

---

## Alternate Solution

### 9.1 Minimum size for allocated space

(1) The minimum allocated space (minimum clear floor or ground space, including knee space under objects as in Figure 1X-X) for a single mobility aid and occupant is 800 mm wide by 1300 mm long and 1500 mm high.

(2) Transport operators may determine the location and orientation of allocated spaces in conveyances.

(3) Mobility aid users may not be able to enter or exit an allocated space in a single manoeuvre, given the internal configurations of a conveyance.

<b>Conveyances</b>	<b>Premises</b>	<b>Infrastructure</b>
except dedicated school buses and small aircraft		except airports that do not accept regular public transport services

---

## Guidelines

The knee space dimensions are only appropriate if using dining spaces or counters. They are not relevant to allocated spaces on unbooked services.

---

## Original Clause

### 9.6 Number of allocated spaces to be provided — train cars, etc

- (1) At least 2 allocated spaces must be provided for each rail, tram or light rail car.
- (2) Up to 8 allocated spaces may be consolidated in one car of a set.
- (3) If different classes of travel are offered, allocated spaces must be provided in each class.

#### Conveyances

- Rail cars
  - Tram cars
  - Light rail cars
- 

## Revised Clause (Exemption)

### 9.6 Number of allocated spaces to be provided — rail, tram, light rail cars

#### Number for unbooked services

- (1) (a) The minimum number of allocated spaces required on an unbooked service is equal to the number of rail cars.  
  
(b) An articulated light rail vehicle or tram with a capacity of 100 or more (including standing passengers) must contain a minimum of 2 allocated spaces.

#### Number for booked services

- (2) The minimum number of allocated spaces required on booked services is 2 spaces for 1 to 7 passenger seating cars, 3 spaces for 8 to 11 passenger seating cars, and 4 spaces for 12 or more passenger seating cars in a consist.
- (3) Up to 8 allocated spaces may be consolidated in one car of a set.

- (4) If seating and sleeping accommodation is provided, allocated spaces and accessible sleeping berths must be provided.

**Conveyances**

- Rail cars
  - Tram cars
  - Light rail cars
- 



**Alternate Solution**

**9.6 Number of allocated spaces to be provided — rail, tram, light rail cars**

**Number for unbooked services**

- 1) At least 2 allocated spaces must be provided for each rail, tram or light rail car on an unbooked service that has more than 32 fixed seats.
- 2) At least one allocated space must be provided in each new rail car, and each car of an articulated light rail vehicle or tram that has less than 33 fixed seats per car. In existing rail cars, this provision per car would be the minimum where technical constraints did not permit compliance with Part 9.6(1)
- 3) An allocated space is additional to the fixed seating capacity.

**Number for booked services**

- 1) The minimum number of allocated spaces is as per unbooked services, but these spaces may be occupied by standard seating until booked as allocated space for a mobility device.
- 2) Up to 8 allocated spaces may be consolidated in one car of a set.
- 3) If different classes of travel are offered, allocated spaces must be provided in each class.
- (4) If seating and sleeping accommodation is provided, allocated spaces and accessible sleeping berths must be provided.

**Conveyances**

- Rail cars
  - Tram cars
  - Light rail cars
-

## Guideline

Suburban and long haul transport operate under very different circumstances. Lower use of long haul transport may be a current issue, however, removable seating and a flexible seating policy could resolve the issue of under utilisation.

Consolidation of allocated spaces will allow better use of nominated boarding points by people who need assistance to board or alight.

DDA requires equity of opportunity and does not easily accommodate 'inefficiencies' if they conflict with human rights. It is suggested that a responsible removable seating policy is the answer.

---

## Original Clause

### 9.7 Consolidation of allocated spaces

If possible, allocated spaces are to be consolidated to accommodate larger mobility aids.

#### Conveyances

- Buses  
except dedicated  
school buses
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Revised Clause (Exemption)

### 9.7 Consolidation of allocated spaces

If possible, allocated spaces are to be provided in close proximity to each other.

#### Conveyances

- Buses  
except dedicated  
school buses
  - Ferries
  - Trains
  - Trams
  - Light rail
-

## Alternate Solution

### 9.7 Consolidation of allocated spaces

If possible, allocated spaces are to be consolidated.

#### Conveyances

- Buses  
except dedicated  
school buses
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Guidelines

The size of a mobility device has never been defined in the Transport Standard, but rather the minimum size of an allocated space is defined. While large mobility aids should not be used, they are likely to remain in use until Transport Authorities begin the risky practice of measuring aids and excluding large units. If allocated spaces are consolidated a vacant space can be used as part of the manoeuvring space (as per Part 9.1 (3) above) required to allow access to another allocated space.

The issue of large mobility aids might be better addressed through a public education campaign and through regulations defining maximum dimensions and performance of scooters prior to their being approved for sale.

---

## Original Clause

### 9.10 International symbol of accessibility to be displayed

- (1) The floor area of an allocated space must:
  - (a) display the international symbol of accessibility; and
  - (b) be outlined in a flush contrasting strip 25 mm wide.
- (2) The colours prescribed in **AS1428.1 (2001) Clause 14.2 (c)** are not mandatory.

#### Conveyances

- Buses
  - Trains
  - Trams
  - Light rail
-

## Revised Clause (Exemption)

### 9.10 International symbol of accessibility to be displayed

- (1) An allocated space must:
  - (a) display the international symbol of accessibility (AS1428.2: 2001 Fig 32); and
  - (b) if displayed on the floor, be outlined in a flush contrasting strip 25 mm wide.
- (2) The preferred colours of white figure on ultramarine blue (AS2700 B21) are not mandatory.

#### Conveyances

- Buses
  - Trains except booked services
  - Trams
  - Light rail
- 

### Alternate Solution

### 9.10 International symbol of accessibility to be displayed

- 1) An allocated space must:
  - (a) At all times, clearly display the international symbol of accessibility (Figure x); and
  - (b) if displayed on the floor, be outlined in a flush contrasting strip 25 mm wide.
- 2) While preferred, colours of white figure on ultramarine blue (AS2700 B21) are not mandatory.

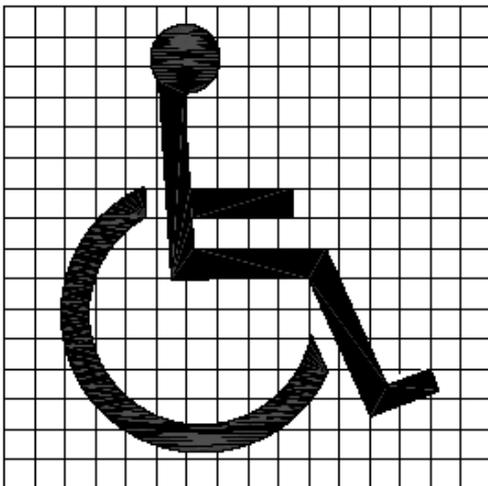


Figure x

### Conveyances

- Buses
  - Trains except booked services
  - Trams
  - Light rail
- 

### Guidelines

The use of the allocated Space use needs to be unambiguous. A sign must be displayed that is visible at all times.

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## Part 10 Surfaces

### Original Clause

#### 10.1 Compliance with Australian Standard

- (1) Ground and floor surfaces must comply with **AS1428.2 (1992) Clause 9**, *Ground and floor surfaces*.
- (2) **AS1428.1 Supplement 1 (1993) Clause C12** provides criteria for the selection of floor surfaces.

#### Conveyances

- Buses  
except dedicated school buses
- Coaches
- Ferries
- Trains
- Trams
- Light rail

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

### Revised Clause for Conveyances (Exemption)

#### 10.1 Compliance with Australian Standard

- (1) Ground and floor surfaces must comply with **AS1428.2 (1992) Clause 9**, *Ground and floor surfaces*.
- (2) **AS1428.1 Supplement 1 (1990) Clause C13** provides criteria for the selection of floor surfaces.

### Conveyances

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Alternate Solution

### 10.1 Compliance with Australian Standard

- (1) Ground and floor surfaces must comply with **AS1428.2 (1992) Clause 9**, *Ground and floor surfaces*.
- (2) **AS1428.1 Supplement 1 (1990) Clause C12** provides criteria for the selection of floor surfaces.

### Conveyances

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Guidelines

While superseded versions such as AS1428.1-1993 may be quoted in the Transport Standard, compliance with a later version (eg 2001) is entirely in order provided no diminution of access occurs (a most unlikely outcome). AS1428.1 Supplement 1 (1993) Clause C12 is the correct reference for floor surfaces (there is no Clause 13).

---

## New Clause (Infrastructure) (Exemption)

### 10.1X Compliance with Australian Standard

- (1) All continuous accessible paths of travel shall have a slip-resistant surface.
- (2) A continuous accessible path of travel shall have a texture that is traversable by a mobility aid.
- (3) Grates on an accessible path of travel shall have spaces not more than 13 mm wide and not more than 150 mm long. If gratings have elongated openings, they shall be placed so that the long dimension is transverse to the dominant direction of travel.

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

### Guideline

Normal safety requirements are applicable to all surfaces. Referencing AS1428.2 Clause 9 automatically picks up Clause 12 of AS1428.1-2001, as there is no date to the reference to AS1428.1 in this Clause of AS1428.2.

## Part 11 Handrails and grabrails

### Original Clause

#### 11.1 Compliance with Australian Standard — premises and infrastructure

- (1) A handrail must comply with **AS1428.2 (1992) Clause 10.1, Handrails.**

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

## Revised Clause (Exemption)

### 11.1 Compliance with Australian Standard — premises and infrastructure

- (1) A handrail must comply with **AS1428.2 (1992) Clause 10.1**, *Handrails*, except Clause 10.1.2(c).
- (2) Where there is a background wall, handrails shall have a colour contrast with the background wall.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Alternate Solution

### 11.1 Compliance with Australian Standard — premises and infrastructure

- (3) A handrail must comply with **AS1428.2 (1992) Clause 10.1**, *Handrails*, except Clause 10.1.2(c).
- (4) Where there is a background wall, handrails shall have a distinct colour contrast with the background wall.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Original Clause

### 11.2 Handrails to be provided on access paths

- (1) Handrails must be placed along an access path wherever passengers are likely to require additional support or passive guidance.

- (2) A handrail must not infringe an area on a roadside boarding point that may be needed to deploy a boarding device.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

---

**Revised Clause (Exemption)**

**11.2 Handrails to be provided on access paths**

- (1) Handrails must be placed along an access path wherever passengers are likely to require additional support or passive guidance.
- (2) A handrail must not infringe an area on a roadside boarding point that may be needed to deploy a boarding device.

**Premises**

**Infrastructure**

Except buildings at railway premises

except airports that do not accept regular public transport services

Except railway infrastructure

---

**Alternate Solution**

**11.2 Handrails to be provided on access paths**

- (1) If handrails are placed along an access path they must provide passengers additional support and passive guidance.
- (2) A handrail must not infringe an area on a roadside boarding point that may be needed to deploy a boarding device.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

---

## Guidelines

If handrails are to be used to direct pedestrian flow, they should also offer support as a function.

## Original Clause

### 11.3 Handrails on steps

- (1) A handrail on steps need not extend beyond the top or bottom of the steps.
- (2) A domed button may be placed 150 mm from any break or end of a handrail instead of an extension at a rail end (**AS1428.2 (1992) Figure 5**).

#### Conveyances

except dedicated  
school buses and  
small aircraft

---

## Revised Clause (Exemption)

### 11.3 Handrails on steps

- (1) A handrail on steps need not extend beyond the top or bottom of the steps.
- (2) A domed button may be placed 150 mm +/- 10 mm from any break or end of a handrail instead of an extension at a rail end.

#### Conveyances

except dedicated  
school buses and  
small aircraft

---

## Guidelines

This provision is only appropriate where space in the conveyance is restricted and where stair access is not required for equitable use of the conveyance. It is accepted that space on some conveyances is restricted, and that not allowing handrails to protrude 300 mm into the circulation space or walkway at the top or bottom of the stairs will save considerable space. If stairs can be fully compliant though they should be.

---

---

## Original Clause

### 11.4 Handrails above access paths

If installed, a handrail above an access path must comply with **AS1428.1 (2001) Clause 6.1 (c)**, *Handrails* and **Figure 9**.

#### Conveyances

except dedicated  
school buses and  
small aircraft

---

## Revised Clause (Exemption)

### 11.4 Handrails above access paths

(1) If installed, a handrail above an access path must comply with **AS1428.1 (2001) Clause 6.1 (c)**, *Handrails* and **Figure 9**, other than where local controls or equipment are in place.

(2) Grabrails may be used where handrails cannot be installed.

#### Conveyances

except dedicated school  
buses, and  
small aircraft

---

## Original Clause

### 11.5 Compliance with Australian Standard

A grabrail must comply with **AS1428.2 (1992) Clause 10.2**, *Grabrails*.

#### Conveyances

except dedicated  
school buses and  
small aircraft

#### Premises

#### Infrastructure

except airports  
that do not  
accept regular  
public transport  
services

---

## Revised Clause (Exemption)

### 11.5 Grabrail compliance requirements

- (1) Grab rails shall be of rigid construction with circular or oval cross section of diameter 30 to 40 mm, designed for a 1100 N load in all directions, slip resistant design where required in wet areas, having hand clearances of 50 to 60 mm, and having an unobstructed hand movement on the top 270 degrees, and minimum corner and edge radii of 5 mm.
- (2) Horizontal grab rails require a clear area 600mm above the rail. Where significant design constraints limit this clearance it should be maximized as much as is technically possible.

<b>Conveyances</b>	<b>Premises</b>	<b>Infrastructure</b>
except dedicated school buses, and small aircraft		except airports that do not accept regular public transport services

---

## Original Clause

### 11.6 Grabrail to be provided where fares are to be paid

A grabrail or handrail must be provided at fixed locations where passengers are required to pay fares.

<b>Conveyances</b>	<b>Premises</b>	<b>Infrastructure</b>
except dedicated school buses and small aircraft		except airports that do not accept regular public transport services

---

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## Revised Clause (Exemption)

### 11.6 Grabrail to be provided where fares are to be paid

A grabrail or handrail may be provided at fixed locations where passengers are required to pay fares by manual exchange of money.

**Conveyances**

except dedicated  
school buses and  
small aircraft

**Premises****Infrastructure**

except airports  
that do not  
accept regular  
public transport  
services

---

## Original Clause

### 11.7 Grabrails to be provided in allocated spaces

Grabrails that comply with **AS1428.2 (1992) Clause 10.2**, *Grabrails*, must be provided in all allocated spaces.

**Conveyances**

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

### Revised Clause (Exemption)

### 11.7 Grabrails to be provided in allocated spaces

Grabrails must be provided in all allocated spaces.

**Conveyances**

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
-

## Part 12 Doorways and doors

### Original Clause

#### 12.1 Doors on access paths

- (1) Any doors along an access path must not present a barrier to independent passenger travel.
- (2) Direct assistance may be provided through security check points.

Conveyances	Premises	Infrastructure
except dedicated school buses and small aircraft		except airports that do not accept regular public transport services

---

### Revised Clause (Exemption)

#### 12.1 Doors on access paths

- (1) Any doors along an access path must not present a barrier to independent passenger travel, or equivalent access must be provided by the Operator.
- (2) Direct assistance may be provided through security check points.
- (3) Doors on conveyances may be controlled or opened by the operator.

Conveyances	Premises	Infrastructure
except dedicated school buses and small aircraft		except airports that do not accept regular public transport services

---

---

### Original Clause

#### 12.2 Compliance with Australian Standard — premises and infrastructure

Doorways and doors must comply with **AS1428.2 (1992) Clause 11** (except **Clause 11.5.2**).

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

---

**Revised Clause (Exemption)**

**12.2 Compliance with Australian Standard – premises and infrastructure**

Doorways and doors (except at toilets) must comply with AS1428.2 (1992) Clause 11 (except Clause 11.5.2).

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

---

**Alternate Solution**

**12.2 Compliance with Australian Standard – premises and infrastructure**

1. Doorways and doors must comply with AS1428.2 (1992) Clause 11 (except Clause 11.5.2) in all new premises and infrastructure.
2. In existing premises and infrastructure where legitimate constraints prevent compliance, the requirements of the Building Code of Australia must be met.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

---

## Guideline

Doorways are critical to the use of premises and infrastructure. Where the Transport Standard can not be met legitimately, the appropriate state Building Act will still apply.

---

## Original Clause

### 12.3 Weight activated doors and sensors

- (1) A pressure pad of a weight activated door must be sensitive enough to detect a 15 kg service animal.
- (2) Any other type of sensor on an access path must be able to detect movement between ground level and 500 mm above the access path.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Revised Clause (Exemption)

### 12.3 Weight activated doors and sensors

- (1) A pressure pad of a weight activated door must be sensitive enough to detect a 15 kg assistance dog.
- (2) Any other type of sensor on an access path must be able to detect movement between ground level and 500 mm above the access path.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

## Original Clause

### 12.4 Clear opening of doorways

Doorways must comply with **AS1428.2 (1992) Clause 11.5.1**, *Clear opening of doorways*.

#### Conveyances

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Revised Clause (Exemption)

### 12.4 Clear opening of doorways

The minimum clear opening of a doorway shall be 850 mm except at a toilet door which may be 750 mm.

#### Conveyances

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
    - Trams
  - Light rail
- 

## Alternate Solution

### 12.4 Clear opening of doorways

1. The minimum clear opening of a doorway shall be 850 mm.
2. In existing conveyances and in certain new situations where in either case technical constraints can be demonstrated, a toilet door may be 800 mm.

### Conveyances

- Buses  
except dedicated  
school buses
  - Coaches
  - Ferries
  - Trains
    - Trams
  - Light rail
- 

### Guidelines

Use of colour contrasting trims is recommended though not required. Their use will assist passengers with vision impairments locate doorways.

In some cases toilet door width of 750 mm will be the only option achievable. In other circumstance, it will easily be exceeded.

---

## Part 13 Lifts

### Original Clause

#### 13.1 Compliance with Australian Standard — premises and infrastructure

Lift facilities must comply with **AS1735.12 (1999)**.

Premises	Infrastructure
----------	----------------

	except airports that do not accept regular public transport services
--	--

---

### Revised Clause (Exemption)

#### 13.1 Compliance with Australian Standard — premises and infrastructure

Subject to the following clause (1), the lift facilities must comply with **AS1735.12 (1999)**:

- (1) The minimum lift car internal dimensions shall be 1100 mm wide by 1400 mm deep between the inside of the closed car doors to the inside back wall of the car.

**Premises**

**Infrastructure**

except airports  
that do not  
accept regular  
public transport  
services

---

### Guidelines

At the 1100 mm x 1400 mm dimension a two door 'travel straight through' design is safer as there is no need to reverse out of a lift in a wheelchair.

## Part 14 Stairs

### Original Clause

#### 14.1 Stairs not to be sole means of access

Stairs must not be the sole means of access.

**Conveyances**

except dedicated  
school buses and  
small aircraft

**Premises**

**Infrastructure**

except airports  
that do not  
accept regular  
public transport  
services

---

### Revised Clause (Exemption)

#### 14.1 Stairs not to be sole means of access

Stairs must not be the sole means of access to facilities designated for passengers with mobility impairment.

**Conveyances**

except dedicated  
school buses small  
aircraft, internal  
stairs on double  
deck trains

**Premises**

**Infrastructure**

except airports  
that do not  
accept regular  
public transport  
services

---

### Guidelines

Stairs should be safe for people with disabilities who are ambulant though.

## Original Clause

### 14.3 Compliance with Australian Standards — conveyances

- (1) If stairs are provided on a conveyance mentioned below, they must comply with:
  - (a) The notes to **AS1428.1 (2001) Clause 9.1**, *Stair geometry*; and
  - (b) **AS1428.2 (1992) Clause 13.2**, *Configuration of steps*, **Clause 13.3**, *Warning strip at nosing of steps* and **Figures 8 and 9**.
- (2) However, the minimum access path width on stairs in the conveyance must be 850 mm.

#### Conveyances

- Ferries
  - Trains
  - Trams
  - Light rail
- 

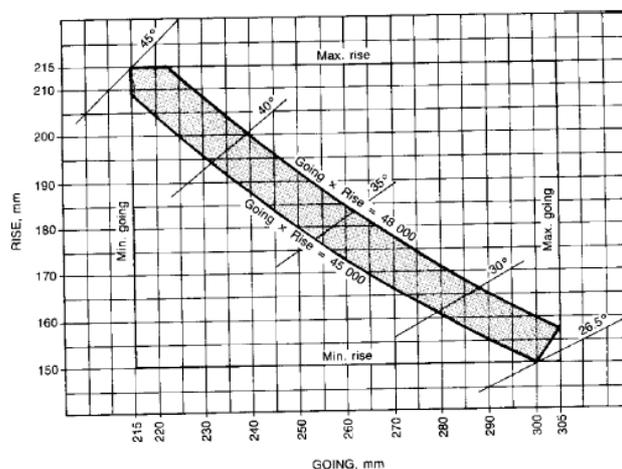
### Revised Clause (Exemption)

### 14.3 Stairs on conveyances

- (1) Stairs must not encroach into circulation spaces and must have opaque enclosed risers.
- (2) Colour contrasted warning nosing strips 50 to 75 mm width on top and 25 to 50 mm width on the vertical edge must be provided on the edge of stair treads.

#### Stairs at the entrance

- (3) Stairs at the entrance to a conveyance must comply with AS 1657 (1992) Figure 4.3 measured at the centre line of the stairs.



NOTE: The combination of dimensions of going and rise must lie within the shaded area, i.e. the product of going  $\times$  rise must be not less than 45 000 nor more than 48 000. For example, for a 250 mm going a suitable rise would lie between 180 mm and 192 mm, and for a 170 mm rise a suitable going would be between 265 mm and 282 mm. Maximum slope for a stairway is 45 degrees and minimum slope 26.5 degrees. The diagram also shows slope lines and indicates the range of dimensions applicable to a given slope.

FIGURE 4.3 STAIRWAY RISES AND GOINGS

### Conveyances

- Ferries
  - Trains
  - Trams
  - Light rail
- 

## Alternate Solution

### 14.3 Stairs on conveyances

- (1) Stairs must not encroach into circulation spaces and must have opaque enclosed risers.
- (2) Colour contrasted warning nosing strips 50 to 75 mm width on top and 25 to 50 mm width on the vertical edge must be provided on the edge of stair treads.

#### Stairs at the entrance

- (3) Stairs at the entrance to a conveyance must comply with AS 1657 (1992) Figure 4.3 measured at the centre line of the stairs. As these stairs are not accessible, passengers with mobility impairments must be provided with equivalent access to board or alight.

FIGURE 4.3 STAIRWAY RISES AND GOINGS

### Conveyances

- Ferries
  - Trains
  - Trams
  - Light rail
- 

## Guidelines

Internal stairs may form part of an access path for people who are vision impaired but not mobility impaired. As such they must be safe for all users.

## Part 15 Toilets

### Original Clause

#### 15.1 Unisex accessible toilet — premises and infrastructure

If toilets are provided, there must be at least one unisex accessible toilet without airlock that complies with **AS1428.1 (2001) Clause 10**, *Sanitary facilities*.

##### Premises

##### Infrastructure

except airports that do not accept regular public transport services

---

### Revised Clause (Exemption)

#### 15.1 Unisex accessible toilet — premises and infrastructure

If toilets are provided, there must be at least one unisex accessible toilet or gender specific accessible toilets without airlock that complies with **AS1428.1 (2001) Clause 10**, *Sanitary facilities* (except clause 10.2.10(e))

##### Premises

##### Infrastructure

except airports that do not accept regular public transport services

---

### Alternative Solution

#### 15.1 Unisex accessible toilet — premises and infrastructure

- a. If toilets are provided, there must be at least one unisex accessible toilet without airlock that complies with **AS1428.1 (2001) Clause 10**, *Sanitary facilities*. Opening pressure for the door must not exceed 20 N.
- b. Existing premises and infrastructure may retain accessible gender specific toilets if technical constraints prevent construction of unisex units.

**Premises**

**Infrastructure**  
except airports  
that do not  
accept regular  
public transport  
services

---

**Guidelines**

A 20N door opening force as per draft will be sufficient. Most commercial units meet this force requirement.

The Building Code of Australia requires that the accessible toilet installed in commercial premises requiring 1 - 100 closet pans or urinals must be unisex. If separate sex accessible toilets are provided they must be in addition to the mandatory unisex toilet.

---

**Original Clause**

**15.2 Location of accessible toilets**

Accessible toilets must be in the same location as other toilets.

**Premises**

**Infrastructure**  
except airports  
that do not  
accept regular  
public transport  
services

---

**Revised Clause (Exemption)**

**15.2 Location of accessible toilets**

If possible, accessible toilets must be in the same location as other toilets or be in a location of equivalent convenience to the access path.

**Premises**

**Infrastructure**  
except airports  
that do not  
accept regular  
public transport  
services

---

## Alternate Solution

### 15.2 Location of accessible toilets

- a. Accessible toilets must be in the same location as other toilets in all new premises or infrastructure.
- b. On existing premises and infrastructure accessible toilets must be in the same location as other toilets or be in a location of equivalent convenience to the access path should technical constraints not permit this.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

### Guideline

Unless technically impossible, accessible toilets must be placed in the same location as other toilets. If located away from other toilets a location of equivalent convenience to the access path must be selected.

---

---

## Original Clause

### 15.3 Unisex accessible toilet — ferries and accessible rail cars

If toilets are provided, there must be at least one unisex accessible toilet without airlock available to passengers using wheelchairs or mobility aids.

#### Conveyances

- Ferries
  - Accessible rail cars
- 

### Revised Clause (Exemption)

### 15.3 Unisex accessible toilet — ferries and trains

If toilets are provided, there must be at least one unisex accessible toilet without airlock available to passengers using compliant mobility aids.

#### Conveyances

- Ferries

- Trains

## Alternative Solution

### 15.4 Unisex accessible toilet — ferries and trains

If toilets are provided, there must be at least one unisex accessible toilet without airlock available to passengers with mobility aids who are located in the allocated spaces.

#### Conveyances

- Ferries
- Trains

## Guideline

Passengers who require accessible toilets should not be disadvantaged in the ease of access to toilets. For example, if dining cars have toilets, it is reasonable to expect that they are 'accessible'. On existing conveyances, it is acknowledged that refurbishment to a fully compliant toilet will not always be possible. The Schedule for Compliance may offer a management tool for the future upgrade of the services.

---

## Original Clause

### 15.4 Requirements for accessible toilets — ferries and accessible rail cars

- (1) An accessible toilet must:
  - (a) comply with the requirements set out in this section; and
  - (b) allow passengers in wheelchairs or mobility aids to enter, position their aids and exit.
- (2) The minimum dimension from the centre line of the pan to the near-side wall must be 450 mm (**AS1428.1 (2001) Figure 22**).
- (3) The minimum dimension from the centre line of the pan to the far-side wall must be 1150 mm (**AS1428.1 (2001) Figure 22**).
- (4) The minimum dimension from the back wall to the front edge of the pan must be 800 mm (**AS1428.1 (2001) Figure 22**).

- (5) The toilet seat must be between 460 mm and 480 mm above the floor (**AS1428.1 (2001) Figure 18**).
- (6) Hand washing facilities must be provided either inside or outside the toilet (**AS1428.1 (2001) Clause 10.2.1 (b)**, *Water closets*).

**Conveyances**

- Ferries
  - Accessible rail cars
- 

**Revised Clause (Exemption)**

**15.4 Requirements for accessible toilets — ferries and accessible rail cars**

- (1) An accessible toilet must allow passengers in mobility aids to enter and exit.
- (2) There shall be sufficient space inside the toilet cubicle for a mobility aid to be positioned so that a disabled person can move from the mobility aid on to the toilet seat from the front or the side of the toilet.
- (3) All unisex toilet amenities must be accessible.
- (4) Hand washing facilities must be provided inside the toilet.

**Conveyances**

- Ferries
  - Accessible rail cars
- 

**Alternative Solution**

**15.4 Requirements for accessible toilets — ferries and accessible rail cars**

**New Ferries and Accessible Rail Cars**

- (1) An accessible toilet must:
  - (a) comply with the requirements set out in this section; and
  - (b) allow passengers in wheelchairs or mobility aids to enter, position their aids and exit.
- (2) The minimum dimension from the centre line of the pan to the near-side wall must be 450 mm (**AS1428.1 (2001) Figure 22**).

- (3) The minimum dimension from the centre line of the pan to the far-side wall must be 1150 mm (**AS1428.1 (2001) Figure 22**).
- (4) The minimum dimension from the back wall to the front edge of the pan must be 800 mm (**AS1428.1 (2001) Figure 22**).
- (5) The toilet seat must be between 460 mm and 480 mm above the floor (**AS1428.1 (2001) Figure 18**).
- (6) Hand washing facilities must be provided either inside or outside the toilet (**AS1428.1 (2001) Clause 10.2.1 (b)**, *Water closets*).

### **Existing Ferries and Rail cars**

- (1) An accessible toilet must allow passengers in mobility aids to enter and exit.
- (2) There shall be sufficient space inside the toilet cubicle for a mobility aid to be positioned so that a disabled person can move from the mobility aid on to the toilet seat from the front or the side of the toilet.
- (3) All unisex toilet amenities must be accessible.
- (4) Hand washing facilities must be provided inside the toilet.

#### **Conveyances**

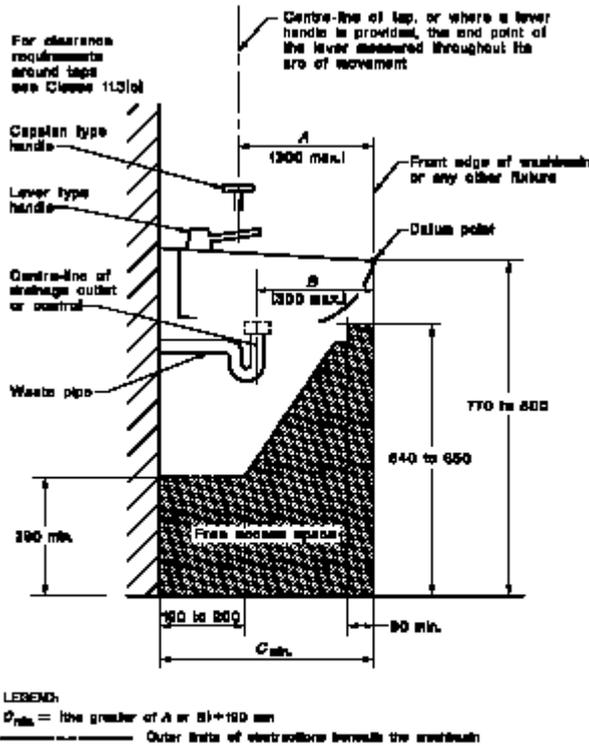
- Ferries
  - Accessible rail cars
- 

### **Guideline**

New work should fully comply with the existing Transport Standards. Where technical constraints exist, unjustifiable hardship can accommodate legitimate non-compliance.

Existing conveyances may not be able to be brought to full compliance. As such the best result possible given the technical constraints should be achieved. It would be useful if information were available on web pages and the like giving dimensions of non-compliant units.

---



NOTE: The dimensions of the unobstructed space beneath the washbasin are critical dimensions.

DIMENSIONS IN MILLIMETRES

FIGURE 23 POSITION OF WASHBASIN AND FIXTURES, AND OUTER LIMIT OF OBSTRUCTIONS BENEATH THE WASHBASIN

## Part 16 Symbols

### Original Clause

#### 16.2 Compliance with AS2899.1 (1986)

The illustrations and symbols prescribed in **AS2899.1 (1986)** must be used if applicable.

Conveyances

Premises

Infrastructure

### Revised Clause (Exemption)

#### 16.2 Compliance with AS2899.1 (1986)

The illustrations and symbols prescribed in **AS2899.1 (1986)**, the Manual of Uniform Traffic Control Devices Part 1 **AS1742.1-2003**, and **ISO 7001:1990** Public Information Symbols must be used if applicable.

### Original Clause

#### **16.3 Accessibility symbols to incorporate directional arrows**

The symbol for accessibility must incorporate directional arrows and words or, if possible, pictograms, to show passengers the way to accessible facilities such as toilets.

### Revised Clause (Exemption)

#### **16.3 Accessibility symbols to incorporate directional arrows**

Directional signage must incorporate accessibility symbols, pictograms (and if needed, words) and directional arrows to show passengers the way to accessible facilities,

### Original Clause

#### **16.5 Accessibility symbol to be visible on accessible doors**

The international symbol of accessibility must be clearly visible both inside and outside accessible doors on these conveyances.

### **Conveyances**

- Ferries
  - Trains
  - Trams
  - Light rail
- 

### **Revised Clause (Exemption)**

#### **16.5 Accessibility symbol to be visible on accessible doors**

The international symbol of accessibility must be clearly visible on the outside of accessible doors.

### **Conveyances**

- Ferries
  - Trams
  - Light rail
- 

## **Part 17 Signs**

### **Original Clause**

#### **17.4 Destination signs to be visible from boarding point**

- (1) Destination signs must be visible from, or available at, boarding points.
- (2) They may be displayed on the conveyance or within the premises or infrastructure.

#### **Conveyances**

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

#### **Premises**

#### **Infrastructure**

## Revised Clause (Exemption)

### 17.4 Destination signs to be visible from boarding point

- (1) Destination signs must be visible from, or available at, the nominated accessible boarding point.
- (2) They may be displayed on the conveyance or within the premises or infrastructure.

Conveyances	Premises	Infrastructure
<ul style="list-style-type: none"><li>• Buses</li><li>• Coaches</li><li>• Ferries</li><li>• Trains</li><li>• Trams</li><li>• Light rail</li></ul>		

---

## Original Clause

### 17.5 Electronic notices

- (1) Presentations of words or numbers on electronic notices must be visible for at least 10 seconds, unless the electronic notice is for the purpose of ticket validation.
- (2) If the electronic notice is for this purpose, the words or numbers on the notice must cease to be visible before the end of 10 seconds if the ticket validation device is used by another person within that time.

**Premises                      Infrastructure**

---

## Revised Clause (Exemption)

### 17.5 Electronic notices

- (1) Presentations of words or numbers on electronic notices must be visible for the maximum time period operationally possible, unless the electronic notice is for the purpose of ticket validation.
- (2) If the electronic notice is for this purpose, the words or numbers on the notice must cease to be visible before the end of 10 seconds if the ticket validation device is used by another person within that time.

**Premises                      Infrastructure**

---

## Guideline

It is accepted that there are severe time constraints on the display of information at busy rail and bus stations. However, some stations may see 30 minutes or more between trains or buses. At low frequency of service locations, information should be displayed for the greatest time practicable.

---

## Original Clause

### 17.6 Raised lettering or symbols or use of Braille

- (1) If a sign incorporates raised lettering or symbols, they must be at least 0.8 mm above the surface of the sign.
- (2) If an operator or provider supplements a notice with Braille characters, they must be placed to the left of the raised characters.

Conveyances

Premises

Infrastructure

---

## Revised Clause (Exemption)

### 17.6 Raised lettering or symbols or use of Braille

- (1) If a sign incorporates raised lettering or symbols, they must be at least 0.6 mm above the surface of the sign.
- (2) If an operator or provider supplements a notice with Braille characters, they must be **left justified** and placed **adjacent** to the text or raised characters.

Conveyances

Premises

Infrastructure

---

## Alternate Solution

### 17.6 Raised lettering or symbols or use of Braille

- (3) If a sign incorporates raised lettering or symbols, they must be raised 1.0 - 1.5 mm above the surface of the sign.
- (4) If an operator or provider supplements a notice with Braille characters, they must be **left justified** and placed **adjacent** to the text or raised characters.

Conveyances

Premises

Infrastructure

---

## Guidelines

As tactile signage and Braille is not mandated, its use in difficult circumstances is optional. However, tactile components of signs covered in premises subject to the Building Code of Australia are required to be raised 1.0 - 1.5 mm.

---

## Part 18      Tactile ground surface indicators

### Original Clause

#### 18.1 Location

Tactile ground surface indicators must be installed on an access path to indicate stairways, ramps, changes of direction, overhead obstructions below a height of 2000 mm, and hazards within a circulation space or adjacent to a path of travel (**AS1428.2 (1992) Clause 18.1**, *Tactile ground surface indicators*).

Premises

Infrastructure

---

### Revised Clause (Exemption)

#### 18.1 Location

- (1) Warning Tactile Ground Surface Indicators (TGSIs), architectural solutions or alternative way-finding aids must be used on an access path to indicate stairways, escalators, ramps and obstructions below a height of 2000 mm.
- (2) Having established the circumstances that assist safe way-finding, design layouts should not over-use or over-prescribe the installation of tactile ground surface indicators, but rather should make full use of the range of environmental guidance features available so as to minimise inconvenience to other members of the community.

Premises

Infrastructure

---

### Original Clause

#### 18.2 Style and dimensions

- (1) The style and dimensions of tactile ground surface indicators must comply with **AS1428.4 (1992)**.

- (2) The stated dimensions may be reduced where a conveyance design does not provide the necessary area.

Premises

Infrastructure

**Revised Clause (Exemption)**

**18.2 Style and dimensions**

- (1) The style and dimensions of warning tactile ground surface indicators must comply with the Figure 18AX.
- (2) Where the tolerance between the truncated cones cannot be met, it shall be minimised.

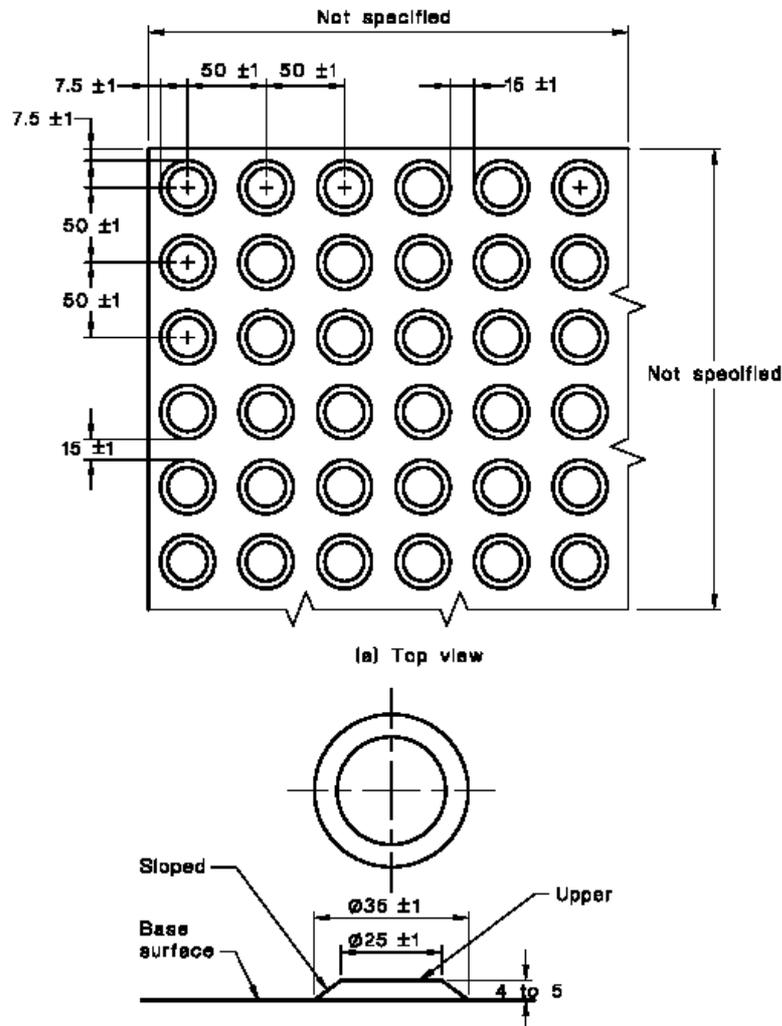


Figure 18AX: Dimensions of a warning tactile

Premises

Infrastructure

## Guidelines

Where the tolerance between the truncated cones cannot be met, such as when TGS1 tiles must be cut to allow their close abutment on a curved platform or kerb-side, it shall be minimised.

---

## Original Clause

### 18.4 Instalment at railway stations

Colour contrasted tactile indicators must be installed at the edges of railway platforms as prescribed by **AS1428.4 (1992) Clause 6.7.**

#### Infrastructure

- Railway platforms
- 

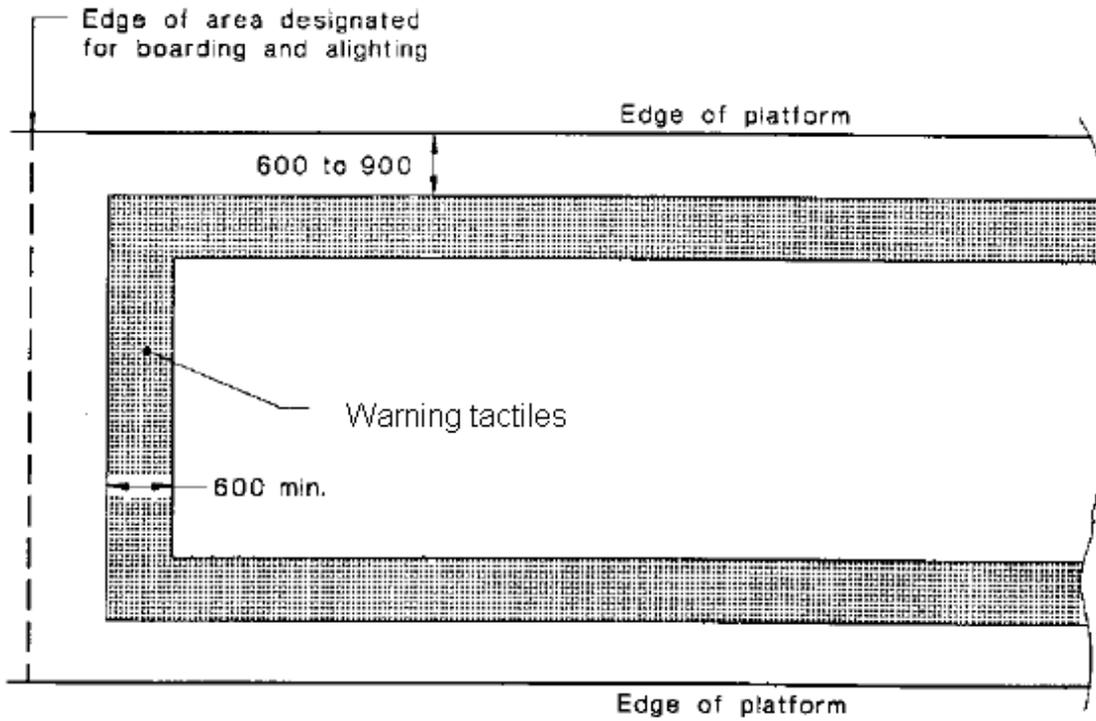
## Revised Clause (Exemption)

### 18.4 Instalment at railway stations

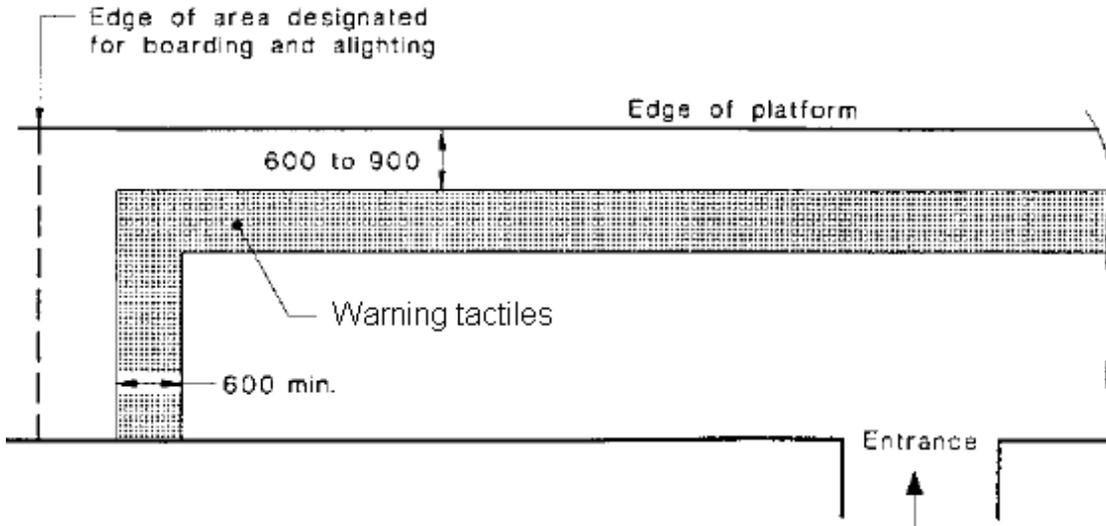
Where alternative hazard barriers, such as a fence, wall or architectural solutions are not installed, colour contrasting warning tactile indicators must be installed as shown in Figure 18BX.

#### Infrastructure

- Railway platforms
-



(a) Example A



(b) Example B

DIMENSIONS IN MILLIMETRES

Figure 18BX: Examples of warning tactiles at railway platforms.

**Infrastructure**

- Railway platforms

## Guideline

The HREOC agreement regarding TGSIs and minimum path of travel width in should be consulted in the interpretation of this Clause (See Part XXXX).

---

## Part 19 Alarms

### Original Clause

#### 19.1 Emergency warning systems

- (1) If installed, emergency warning systems must comply with **AS1428.2 (1992) Clause 18.2.1**, *Emergency warning systems*, **Clause 18.2.2**, *Audible alarms*, and **Clause 18.2.3**, *Visual alarms*.
- (2) Provision must be made for people with vision impairment to locate the exit path in the event of an emergency.

Conveyances

Premises

Infrastructure

---

### Revised Clause (Exemption)

#### 19.1 Emergency warning systems

- (1) If installed, emergency warning systems must comply with **AS1428.2 (1992) Clause 18.2.1**, *Emergency warning systems*, **Clause 18.2.2**, *Audible alarms*, and **Clause 18.2.3**, *Visual alarms*.
- (2) Provision must be made for people with a disability to locate the exit path in the event of an emergency.

Conveyances

Premises

Infrastructure

---

## Part 20 Lighting

### Original Clause

#### 20.1 Illumination levels – premises and infrastructure

Any lighting provided must comply with minimum levels of maintenance illumination for various situations shown

in the notes to **AS1428.2 (1992) Clause 19.1, Illumination levels.**

**Premises**

**Infrastructure**

**Revised Clause (Exemption)**

**20.1 Illumination levels— premises and infrastructure**

- (1) Any lighting provided must comply with minimum levels of maintenance illumination for various situations shown in the notes to **AS1428.2 (1992) Clause 19.1, Illumination levels, except.**
- (2) Any lighting provided on railway stations must comply with the following:

	Recommended minimum luminance			
	Code	Eav	E min	EV min
<b>Enclosed stations</b>				
Entrance, passageways, walkways	AS1428.2	150		
Stairs	AS1428.2	150		
Ramps	AS1428.2	150		
Toilets and locker rooms	AS1428.2	200		
Counter tops	AS1428.2	250		
Displays (timetables)	AS1428.2	200		
Telephones (ticket machines)	AS1428.2	200		
General platform	AS1680.2.1	160		
Yellow line (platform edge)			150	
<b>Open stations</b>				
Toilets and locker rooms	AS1428.2	200		
Counter tops	AS1428.2	250		
Displays (timetables)	AS1428.2	200		
Telephones (ticket machines)	AS1428.2	200		
Yellow line (platform edge)			30	
General platform	AS1158.3.1	42	21	14
Covered areas	AS1680.2.1	160		
Core areas (awning)	AS1680.2.1	160		
Ramps and steps (open)	AS1158.3.1	42	21	14
Open footbridge	AS1158.3.1	42	21	14
Primary access paths	AS1158.3.1	42	21	14
Enclosed footbridge	AS 1428.2	150		
Subways	AS1158.3.1	35	17.5	17.5

**Interpretation**

The interpretation from using both of these Australian Standards is that the 'core zone' of the station where tickets are sold, information is provided, vending machines, telephones and out of weather seating are placed will have **150 lux** minimum maintenance illumination. Within

this area spot vertical lighting of between **200-300 lux** will be provided above ticket counters, timetables, information posters, vending machines and telephones.

- (3) Any lighting provided on pedestrian level crossings that provide direct access to a boarding point must comply with AS 1742.7 Pedestrian Level Crossings.

**Premises**

**Infrastructure**

**Guidelines**

The lighting of open stations to the lux levels required by the current Transport Standard may cause environmental disturbance. However, the outdoor lighting levels suggested above are as yet untested. The figures in the Table above should be reassessed in 2007.

## Part 21            Controls

### Original Clause

**21.1    Compliance with Australian Standard — premises and infrastructure**

Controls must comply with **AS1428.1 (2001) Clause 11**.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

### Revised Clause (Exemption)

**21.1    Compliance with Australian Standard — premises and infrastructure**

Controls must comply with **AS1428.1 (2001) Clause 11**, except Clause 11.1.1 (c).

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

## Alternate Solution

### Compliance with Australian Standard — premises and infrastructure

Controls must comply with **AS1428.1 (2001) Clause 11**. Doors must not exceed 20 N of force to open.

#### Premises

#### Infrastructure

except airports that do not accept regular public transport services

---

### Guidelines

Twenty 20 N force, maximum, is sufficient to ensure easy opening of a door.

## Original Clause

### 21.2 Passenger-operated devices for opening and closing doors

Passenger-operated devices for opening and closing manual and power-assisted doors on conveyances must comply with **AS1428.2 (1992) Clause 23.2**, *Operation*, and **Clause 23.3**, *Door handles and hardware*.

#### Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

### Revised Clause (Exemption)

### 21.2 Passenger-operated devices for opening and closing doors

Passenger-operated devices for opening and closing manual and power-assisted doors on conveyances, other than emergency door controls, must comply with **AS1428.2 (1992) Clause 23.2**, *Operation*, and **Clause 23.3**, *Door handles and hardware*.

### Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Alternate Solution

### 21.2 Passenger-operated devices for opening and closing doors

Passenger-operated devices for opening and closing manual and power-assisted doors on conveyances, other than emergency door controls, must comply with **AS1428.2 (1992) Clause 23.2, Operation**, and **Clause 23.3, Door handles and hardware**. Emergency Doors must be opened by direct assistance.

### Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Guidelines

If emergency doors are intended for use by the public rather than operated solely by staff, a person with a disability may be trapped if alone in a conveyance or if not assisted by other passengers. Where door opening pressure exceeds 20N staff must operate the controls in emergencies for the safe egress of people who have disabilities.

---

## Original Clause

### 21.3 Location of passenger-operated controls for opening and locking doors

Passenger-operated opening and locking controls for doors on conveyances must be located according to **AS1428.1 (2001) Clause 11.1.2, Location**.

### Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

### Revised Clause (Exemption)

#### 21.3 Location of passenger-operated controls for opening and locking doors

Passenger-operated opening and locking controls for doors on conveyances must be located according to **AS1428.1 (2001) Clause 11.1.2, Location** except that door controls may be placed closer than 500 mm from an internal corner so long as they are accessible to a person using a compliant mobility aid.

### Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

### Alternate Solution

#### 21.3 Location of passenger-operated controls for opening and locking doors

Passenger-operated opening and locking controls for doors on conveyances must be located according to **AS1428.1 (2001) Clause 11.1.2, Location** except that door controls may be placed closer than 500 mm from an internal corner, provided there is sufficient circulation space for them to be accessed by a person using a mobility aid.

## Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

## Guidelines

For controls to be workable by people who have disabilities it is essential that they have sufficient circulation space around them and that they be located at realistic heights above the floor or other surface. 'Internal controls' do not suffer from the floor level variation constraints listed above. 'External controls' do however suffer variation due to platform, kerb and wharf heights not being uniform. For external controls, every effort should be made to comply with the Part above on a majority of platforms.

---

## Part 22 Furniture and fitments

### Original Clause

#### 22.1 Tables, benches, counters, etc

Tables, benches, counters and similar fixtures must comply with **AS1428.2 (1992) Clauses 24.1, 24.1.1, 24.1.2, 24.1.3, 24.1.4 and 24.1.5.**

**Premises**

except airport  
terminals

**Infrastructure**

---

### Revised Clause (Exemption)

#### 22.1 Tables, benches, counters, etc

- (1) At least one ticket counter must be suitable for passengers using mobility aids.
- (2) Any tables provided for designated wheelchair locations must be suitable for passengers using mobility aids as per Figure 1X-X.

**Conveyances**

- Booked services

**Premises**

except airport terminals

**Infrastructure**

---

**Guidelines**

A ticket counter at a height suitable for a person using a mobility aid needs a point of reference. It is suggested that AS1428.2 Clause 24.1.1. is appropriate. Tables and furniture provided by leaseholders in Transport premises and infrastructure should be accessible as part of the conditions of tender.

---

**Original Clause****22.5 Accessible sleeping berths — trains**

- (1) If a train has sleeping berths, a minimum of 2 accessible berths must be provided in each set of up to 4 sleeping cars, or one accessible sleeping berth must be provided for every 32 bunks.
- (2) If different classes of travel are offered, accessible sleeping berths must be provided in each class.

**Conveyances**

- Trains
- 

**Revised Clause (Exemption)****22.5 Accessible sleeping berths — trains**

- (1) If a train has sleeping berths, a minimum of 1 accessible sleeping berth must be provided.
- (2) If a train has more than 2 rail cars with sleeping berths, a minimum total of 2 accessible sleeping berths must be provided.

**Conveyances**

- Trains
- 

**Alternate Solution****22.5 Accessible sleeping berths — trains****New Trains**

- (1) If a train has sleeping berths, a minimum of 2 accessible berths must be provided in each set of up to 4 sleeping

cars, or one accessible sleeping berth must be provided for every 32 bunks.

- (2) If different classes of travel are offered, accessible sleeping berths must be provided in each class.

#### Existing Trains

- (1) If a train has sleeping berths, a minimum of 1 accessible sleeping berth must be provided.
- (2) If a train has more than 2 rail cars with sleeping berths, a minimum total of 2 accessible sleeping berths must be provided.

#### Conveyances

- Trains
- 

#### Guidelines

Accessible berths need to take 'people with mobility impairments' rather than just wheelchair users. While minimum numbers proposed for existing services are less than those for new, they should be exceeded if possible, and compliance with numbers for new services met where possible.

## Part 23 Street furniture

### Original Clause

#### 23.1 Seats

Seats must comply with **AS1428.2 (1992) Clause 27.2**, *Seating in pedestrian areas*.

Premises	Infrastructure
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	except airports that do not accept regular public transport services
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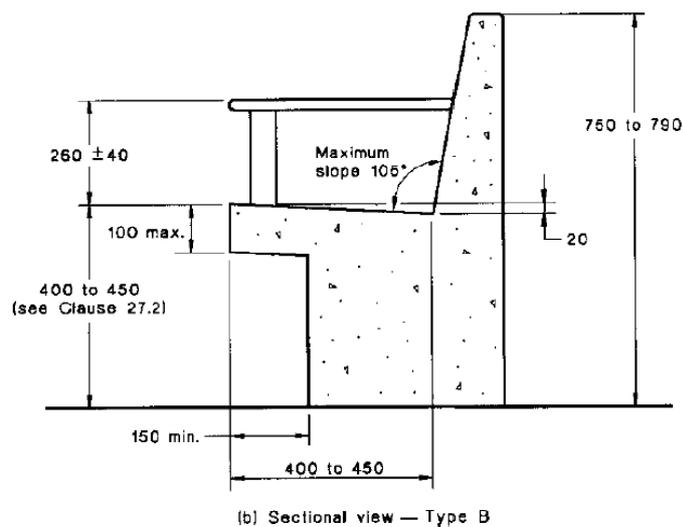
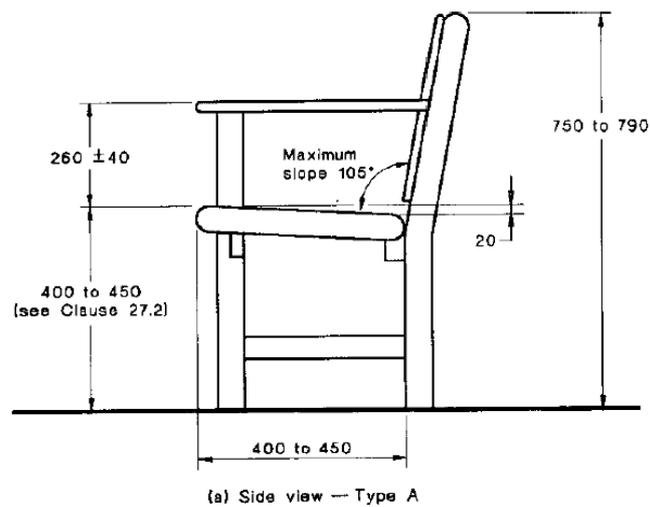
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### Revised Clause (Exemption)

#### 23.1 Seats

The design and installation of seating shall be as Figure 23X and recommended dimensions as follows:

- (1) The front of the seat shall have a clear space between any legs at ground level to within 150 mm of the front edge of the seat, and to within 100 mm of the seat height to allow for rearward adjustment of feet when rising.
- (2) Where armrests are provided, the top surface of the armrests shall be at a height of  $260 \pm 40$  mm above the seat.
- (3) The front edge of the seat shall have a minimum radius of 30 mm.
- (4) No edge or projection shall have a radius of less than 5 mm unless protected from contact with the user.
- (5) The seat shall drain free of water.



DIMENSIONS IN MILLIMETRES

FIGURE 23X TYPICAL PARK BENCH SEATING – Recommended dimensions

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

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## Part 24 Gateways

### Original Clause

#### 24.1 Gateways and checkouts

- (1) Gateways and checkouts, such as ticket barriers, must comply with **AS1428.2 (1992) Clause 28**, *Gateways and checkouts*.
- (2) However, the width of an accessible gateway or checkout mentioned in **AS1428.2 (1992) Clause 28.2** must be at least 850 mm.

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

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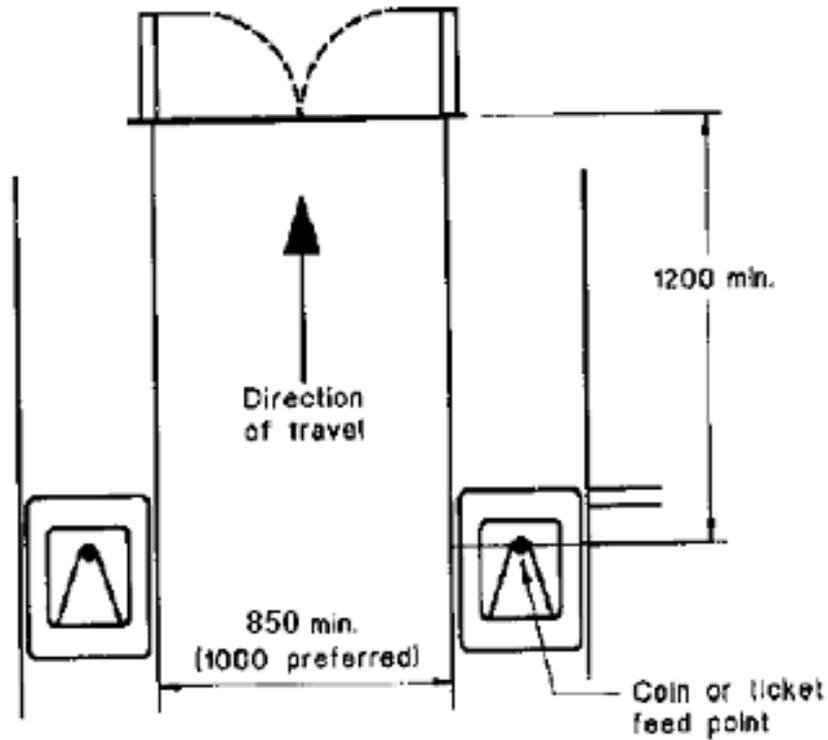
### Revised Clause (Exemption)

#### 24.1 Gateways and checkouts

Gateways and checkouts, such as ticket barriers, must comply with the following:

- (1) The international symbol for access (see Clause 16.1) shall be used to designate where access is available.
- (2) Where gateways and checkouts are installed, at least one barrier opening shall be not less than 850 mm wide.
- (3) The ticket, coin feed points shall be at a height of 800 mm to 1200 mm from the finished floor. Any controls needed to operate these machines shall have tactile applications for vision-impaired users.
- (4) A non-contact card reader shall be at a height range of 700 mm to 1200 mm from the finished floor.

- (5) Any barrier shall be not less than 1200 mm past the ticket or coin feed point in the direction of travel (see Figure 24X).



DIMENSIONS IN MILLIMETRES

FIGURE 24X BARRIERS WITH TICKET OR COIN FEED POINTS

**Premises**

**Infrastructure**

except airports that do not accept regular public transport services

## Alternate Solution

### 24.2 Gateways and checkouts

Gateways and checkouts, such as ticket barriers, must comply with the following:

- (1) The international symbol for access (see Clause 16.1) shall be used to designate where access is available.
- (2) Where gateways and checkouts are installed, at least one barrier opening shall be not less than 850 mm wide.
- (3) The ticket, coin feed points shall be at a height of 800 mm to 1200 mm from the finished floor. Any controls needed to

operate these machines shall have tactile applications for vision-impaired users.

- (4) A non-contact card reader shall be at a height range of 700 mm to 1200 mm from the finished floor.
- (5) Any barrier shall be not less than 1200 mm past the ticket or coin feed point in the direction of travel (see Figure 24X).
- (6) Controls that require manipulation shall be placed in the range of 900 mm to 1100 mm.

## Guidelines

Card readers should be in the range of 900 mm to 1100 mm.

The zone of common reach defines an area in which 'objects' are in reach ranges common to people sitting or standing. The objects are various. Specific requirements for controls and coin feeds are listed in other clauses of AS1428.2.

Part 24.1 of the Transport Standard refers directly to Gateways and Checkouts. It is best to use the directly relevant Clause from AS1428.2 (Clause 28) rather than extrapolating from vending machine or telephone requirements.

## Part 25 Payment of fares

### Original Clause

#### 25.3 Vending machines

Vending machines must comply with **AS1428.2 (1992) Clause 29.1, Height, Clause 29.2, Controls, and Clause 29.3, Illumination.**

Conveyances	Premises	Infrastructure
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### Revised Clause (Exemption)

#### 25.3 Ticket vending machines

Ticket vending machines must comply with the following:

- (1) The height of the operative components shall be between 500 mm and 1200 mm above the trafficable surface.
- (2) The required operating force for any control shall not exceed 19.5 N.
- (3) Illumination shall be provided in accordance with Part 20 Lighting.

**Guideline**

Braille is not required by Clause 29.2, but rather a tactile and visually contrasting surface for controls is required. This means buttons etc can be easily felt. Touch screens or flush buttons are not useable by blind passengers.

**Original Clause****25.4 Circulation space in front of vending machine**

The circulation space in front of any vending machine must allow for a 180 degree turn as in **AS1428.2 (1992) Clause 6.2**, *Circulation space for 180 degree wheelchair turn*.

**Premises****Infrastructure**

except airports that do not accept regular public transport services

**Revised Clause (Exemption)****25.4 Circulation space in front of a ticket vending machine**

The circulation space in front of any ticket vending machine must allow for a 180 degree turn as in Clause 3.1.

**Premises****Infrastructure**

except airports that do not accept regular public transport services

## Part 26            Hearing augmentation– listening systems

### Original Clause

#### 26.2    Public address systems — conveyances

If a public address system is installed:

- (a) people who are deaf or have a hearing impairment must be able to receive a message equivalent to the message received by people without a hearing impairment; and
- (b) it must comply with **AS1428.2 (1992) Clause 21.1**, *Hearing augmentation*.

Conveyances

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
- 

### Revised Clause (Exemption)

#### 26.2    Public address systems — conveyances

If a public address system is installed, people who are deaf or have a hearing impairment must be able to receive a message equivalent to the message received by people without a hearing impairment.

**Conveyances**

- Buses
  - Coaches
  - Ferries
  - Trains
  - Trams
  - Light rail
-

## Guidelines

Visual information can provide a reasonably equivalent summary of audio information but is unable to exactly replicate every audio message. Other forms of direct assistance may be used to supplement visual messaging. Rail authorities should consult widely to determine what constitutes a 'message equivalent to the message received by people without a hearing impairment'.

## Part 27 Information

### Original Clause

#### 27.1 Access to information about transport services

General information about transport services must be accessible to all passengers.

Conveyances	Premises	Infrastructure
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### Revised Clause (Exemption)

#### 27.1 Access to information about transport services

- (1) Information necessary to use the transport service must be accessible to all passengers.
- (2) Provision of accessible information assumes that all passengers have a minimum level of literacy, English language skills and an ability to communicate their destination if required.

Conveyances	Premises	Infrastructure
-------------	----------	----------------

---

### Original Clause

#### 27.2 Direct assistance to be provided

If information cannot be supplied in a passenger's preferred format, equivalent access must be given by direct assistance.

*Note* See sections 33.3 to 33.6 in relation to equivalent access and direct assistance.

**Revised Clause (Exemption)**

**27.2 Equivalent access**

- (1) If essential information cannot be supplied in a passenger's preferred format, equivalent access must be given.
- (2) Certain formats may only be available from certain outlets/locations.  
*Note* See sections 33.3 to 33.6 in relation to equivalent access and direct assistance.

**Guidelines**

It is most important that the material will be obtained from the various outlets and location in a timely manner.

---

---

**Original Clause**

**27.3 Size and format of printing**

- (1) Large print format type size must be at least 18 point sans serif characters.
- (2) Copy must be black on a light background.

**Revised Clause (Exemption)**

**27.3 Size and format of printing**

- (1) If provided, large print format type size must be at least 18 point sans serif characters.
- (2) Copy must optimise colour contrast between text and background.

**Guidelines**

Supporting material will need to be developed to define optimal colour contrast.

---

## Original Clause

### 27.4 Access to information about location

All passengers must be given the same level of access to information on their whereabouts during a public transport journey.

#### Conveyances

---

### Revised Clause (Exemption)

### 27.4 Access to information about location

- (1) All passengers must be given the same level of access to essential information on their whereabouts during a public transport journey.
- (2) If this is not practicable, operators must provide equivalent access.

*Note* See sections 33.3 to 33.6 in relation to equivalent access and direct assistance.

#### Conveyances

---

## Part 28 Booked services

### Original Clause

### 28.1 Notice of requirement for accessible travel

Operators of booked services may request advance notice of a requirement for accessible travel.

#### Conveyances

- Aircraft
  - Coaches
  - Ferries
  - Dial-a-ride services
  - Trains
-

## Revised Clause (Exemption)

### 28.1 Notice of requirement for accessible travel

- (1) Operators of booked services may request reasonable advance notice of a requirement for accessible travel.
- (2) Passengers with disabilities requiring assistance, or having special requirements, must notify the operator of their requirements when they book their travel.
- (3) Passengers requiring assistance to transfer from a mobility aid to a seat, or with feeding, personal hygiene / toileting, medication or the dis/assembly and operation of disability aids must book and travel with a carer.

#### Conveyances

- Aircraft
  - Coaches
  - Ferries
  - Dial-a-ride services
  - Trains
- 

## Original Clause

### 28.2 Period of notice of requirement for accessible travel

Any advance notice required of a requirement for accessible travel must not exceed the period of notice specified for other passengers.

#### Conveyances

- Coaches
  - Ferries
  - Dial-a-ride services
  - Trains
- 

## Delete Clause 28.2 (Exemption)

### Alternate Solution

Retain the Clause.

## Guidelines

Rather than delete the clause, use it to specify what the 'reasonable advance notice of a requirement for accessible travel' will be. It would be reasonable to assume that general booking timeframes were sufficient.

---

## Original Clause

### 28.3 Location of carers, assistants and service animals

- (1) On booked services, operators must locate carers, assistants or service animals with the passenger with whom they are travelling.
- (2) In the case of carers or assistants, this would normally be in an adjoining seat.
- (3) If a passenger is travelling with a service animal, the animal must be able to accompany the passenger at all times and to travel without encroaching onto an access path.

#### Conveyances

- Aircraft
  - Coaches
  - Ferries
  - Dial-a-ride services
  - Trains
- 

## Revised Clause (Exemption)

### 28.3 Location of carers, assistants and assistance dogs

- (1) On booked services, operators must locate carers, assistants or assistance dogs with the passenger with whom they are travelling.
- (2) In the case of carers or assistants, this would normally be in an adjoining seat.
- (3) If a passenger is travelling with an assistance dog, the animal must be able to accompany the passenger at all times and to travel without encroaching onto an access path.

### Conveyances

- Aircraft
  - Coaches
  - Ferries
  - Dial-a-ride services
  - Trains
- 

### Guideline

While 'comfort animals' are not assistance animals, legitimate use may be made of trained and registered animals other than dogs in directly using a public transport service.

---

## Part 29 Food and drink services

### Original Clause

#### 29.1 Equal access to food and drink services

Operators and providers must ensure that any food or drink service that is provided as part of a public transport service is equally available to all passengers.

Conveyances	Premises	Infrastructure
-------------	----------	----------------

---

### Revised Clause (Exemption)

#### 29.1 Equal access to food and drink services

Operators and providers must ensure that any food or drink service that is provided as part of a public transport service is equally available to all passengers.

Conveyances	Premises	Infrastructure
-------------	----------	----------------

Except unbooked train services	Except rail premises	Except rail infrastructure
--------------------------------	----------------------	----------------------------

---

### Guidelines

Unbooked trains, buses, ferries, taxis etc will not normally provide food or beverages. Further, premises and infrastructure may have outlets or vending machines that are not run or owned by the transport provider that are not provided as part of a transport service. Therefore, operators and providers must ensure that any food or drink that they or their contractors provide,

wether for payment or not, as a service to all passengers as part of a public transport service is equally available to all passengers.

---

## Part 30 Belongings

### Original Clause

#### 30.1 Disability aids to be in addition to baggage allowance

- (1) Disability aids (for example, equipment and apparatus including mobility, technical and medical aids) are to be in addition to normal baggage allowances.
- (2) If possible, disability aids are to be treated in the same way as cabin or accompanied baggage.

#### Conveyances

- Aircraft
  - Coaches
  - Ferries
  - Trains
- 

### Revised Clause (Exemption)

#### 30.1 Disability aids to be in addition to baggage allowance

- (1) Disability aids are to be in addition to normal baggage allowances.
- (2) If possible, disability aids are to be treated in the same way as cabin or accompanied baggage.
- (3) Disability aids which will be transported in the luggage compartment must comply with the operator's size limitations for passenger luggage.
- (4) Only mobility aids that comply with Part 1X may be carried on public transport conveyances.
- (5) Operators are not required to carry mobility aids as priority / additional baggage in the luggage compartment of booked services:
  - (a) where allocated space for mobility aids is provided in the seating / sleeping compartment

when all allocated spaces in the seating / sleeping compartment are already booked on the required service.

- (6) Operators are not responsible for the assembly / disassembly or operation of disability aids on public transport services, premises or infrastructure.

**Conveyances**

- Aircraft
  - Coaches
  - Ferries
  - Booked Trains
- 

**Alternate Solution**

**30.1 Disability aids to be in addition to baggage allowance**

- (1) Disability aids are to be in addition to normal baggage allowances.
- (2) If possible, disability aids are to be treated in the same way as cabin or accompanied baggage.
- (3) Disability aids which will be transported in the luggage compartment must comply with the operator's size limitations for passenger luggage.
- (4) Operators are not required to carry mobility aids as priority / additional baggage in the luggage compartment of booked services:
- (a) where allocated space for mobility aids is provided in the seating / sleeping compartment when all allocated spaces in the seating / sleeping compartment are already booked on the required service.
- (5) Operators are not responsible for the assembly / disassembly or operation of disability aids on public transport services, premises or infrastructure.

**Conveyances**

- Aircraft
  - Coaches
  - Ferries
  - Booked Trains
-

## Guidelines

It is not the mobility aid that is defined in the Transport Standard but rather its minimum allocated space.

# Part 31 Priority

## Original Clause

### 31.1 Priority seating

Operators must designate at least 2 of the seats provided on their unbooked conveyances as priority seating for passengers with disabilities and other groups in need of special assistance (for example, the aging).

#### Conveyances

- Buses
  - Ferries
  - Rail cars
  - Trams
  - Light rail
- 

## Revised Clause (Exemption)

### 31.1 Priority seating

- (1) Operators must designate at least 2 of the seats provided on their unbooked conveyances as priority seating for passengers with disabilities and other groups in need of special assistance (for example, the aging).
- (2) Operators may determine the location and orientation of priority seats.

#### Conveyances

- Buses
  - Ferries
  - Rail cars
  - Trams
  - Light rail
- 

## Guidelines

It may be reasonably assumed that seats will be located fairly and equitably.