

4.0 Communications

4.1 Introduction

This section covers communications, whether visual, aural or tactile, and all exchange of information.

This section is divided into the following sections:

- Principles
- Hearing Augmentation
- Telephones
- Lighting
- Signage
- Tactual Maps.

4.2 Principles

All communication systems shall be accessible by all people with a disability, including those who are blind, have low vision or a hearing, mobility or intellectual impairments.

Good-quality communication systems will benefit all people, and to an extent, those from non English speaking backgrounds, especially in crowded areas.

4.3 Hearing Augmentation

Hearing augmentation uses alternative or enhanced means of communication to assist people who are deaf or hearing impaired and includes assistive listening systems (ALS), audio, visual and tactile methods. Hearing augmentation is to be provided appropriately to each setting. ALS are the main methods of providing augmentation by enhancing speech clarity through transmitter and receiver systems. Visual images and text, flashing light, vibrating alarm systems, telephone typewriter (TTY's) and sign language, are also used.



An assistive listening system shall be provided to all venues complying with AS 1428.1 and 2 and SHHH (Self Help for Hard of Hearing Australia Inc) advice. A new Standard, AS 1428.5 Hearing Augmentation, is being developed for inclusion in the National Disability Standard on Access to Premises.

An assistive listening system (which may be an audio frequency induction loop system, modulated radio system or infrared system) shall be provided in public areas so that people who are deaf or hearing impaired have equal participation in all activities.

This shall include:

- a minimum of 15% of all seating equitably dispersed throughout the seating areas and including some wheelchair positions
- at least one conference room, assembly area, meeting room and the like
- any area with an amplification system
- at least one ticket booth, reception and enquiries counter or the like where the service provider is screened from the customer.

In addition to the permanent systems, at least one portable system shall be provided for use in other areas as required.

Signage using the international symbol for deafness shall indicate that an assistive listening system is provided, the type of system provided and which part of the auditorium is covered.

In the event of an emergency any scoreboard or video screen capable of displaying public announcements is to be used to supplement the public address system.

Similarly, in isolated areas within buildings, such as accessible sanitary facilities, visual alarms shall accompany any auditory warning system.

Assistive listening systems are to be regularly maintained in working order and to be tested prior to each event.

Where live-time information and 'live sites' are used and as appropriate, the following are to be provided and advertised:

- FM induction systems
- PA system and hearing loop
- captioning on some scoreboards and video screens
- closed captioning for live broadcast.

4.4 Telephones

All accessible telephones shall comply with AS 1428.2.

In order that public telephones are accessible by all members of the public, at least one, and preferably the first phone in every bank of telephones, shall be wheelchair accessible and include the following features:

- a hearing aid couple (for use with a 'T' switch on hearing aids)
- volume control
- coin and card operation
- telephone typewriter (TTY).

To allow a wheelchair to be located side-on to the accessible telephone, it shall be no closer than 300 mm to an obstruction at the sides.

Accessible telephones shall be located adjacent to the accessible path of travel and shall minimise the ambient noise.

Accessible telephones shall be clearly identified by the international symbol, including the TTY symbol.

Refer also to AS 1428.4 Tactile ground surface indicators.

4.5 Lighting

Lighting shall comply with AS 1428.2 and AS 1680 Part 1 and Part 2.1.

A uniform level of light to eliminate shadows shall be provided along the main accessible pathways. This shall be glare-free with a minimum level of 50 lux at ground level.

The design and detailing of lighting shall eliminate glare, illuminate signage and highlight changes of level.

Illuminance levels shall be uniform and comply with the requirements for maintenance illumination in all internal circulation spaces, including publicly accessible areas. A minimum illumination of 40 lux, uniformity of no less than 0.3 and an average maintained value of 120 lux shall be provided.

A graduated level of illumination shall be provided at building entries and exits to assist people who are blind or have low vision. A minimum of 50 lux shall be provided outside the entry or exit.

Adequate lighting shall be provided in conference rooms, meeting rooms, auditoria and the like for sign language interpretation for people who are deaf or hearing impaired. Back lighting should be avoided, as it makes both the face of the lecturer and the lip movement and signing of the interpreter difficult to see.

4.6 Signage

All signage shall comply with AS 1428.2.

Braille and tactile signage shall comply with specification D3.6 of the Building Code of Australia.

All signage shall be clear and legible, and incorporate the appropriate international symbol. To assist legibility, international pictograms shall be used in addition to words.

Tactual signs shall be provided where signage is provided in key locations, including entrances, exits, lifts, sanitary facilities and areas with hearing augmentation.

Directional signs shall be provided at regular intervals, but at least at every major change of direction where there is more than one path of travel. These signs shall include distances to the next destination.

The colour of signs and lettering shall be chosen to enhance the legibility of the signs and have a minimum 30% luminance contrast.

Recommended colour combinations are:

- white on black
- yellow on black
- white on blue to AS 1428.1.

Font styles shall be simple, clear and easy to read, such as Helvetica. Sans serif fonts are preferred to serif fonts.

Backlit signage shall ensure there is no glare factor. Where signs cannot be backlit, they are to be externally illuminated to a minimum average level of 50 lux.

All signs shall be of a non-reflective, non-glossy surface to avoid reflective glare and ensure readability.

Tactual signs shall repeat the primary signage and be mounted at a height of 1200 mm to 1600 mm above the ground. Tactual signs shall use enlarged raised print and Braille, internationally recognised symbols, in accordance with AS 2899.1. Luminance contrast shall be a minimum of 30%, with Braille signage integrated in each sign. Raised lettering shall comply with D3.6 of the BCA.

Clocks should be at least 1350 mm in diameter, backlit, with a white opaque background. Hands and numerals should be formed in bold black characters for ease of reading.

All public domain egress signs shall clearly show the directions to public transport, venues and major destinations.

4.7 Tactual Maps

Hand-held tactual maps may be of assistance to some users who are blind or have low vision. In the public domain, tactual maps provide general orientation to venues and facilities.