INDOOR VENUES SPORT SPECIFICATIONS, GUIDELINES AND RECOMMENDATIONS

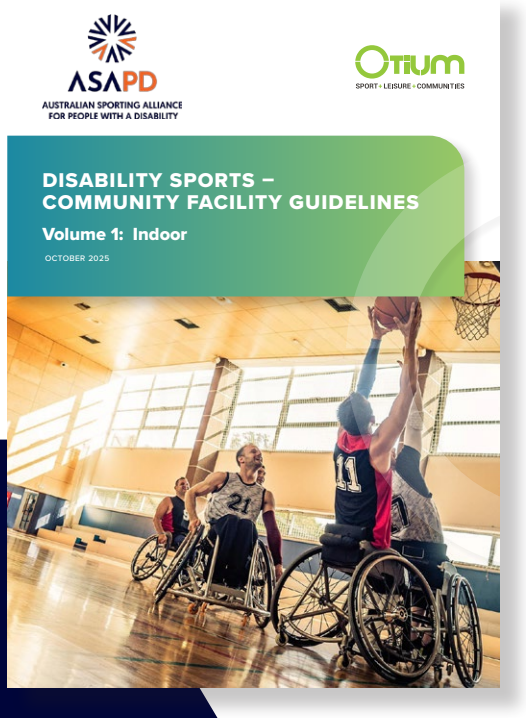
October 2025

ASAPD

AUSTRALIAN SPORTING ALLIANCE
FOR PEOPLE WITH A DISABILITY

To be read in conjunction with the Disability Sport Community Facility Guidelines - Vol. 1 Indoor (prepared by Otium Planning Group on behalf of Australian Sporting Alliance for People with a Disability, and Paralympics Australia).

The runway to the 2032 Olympic and Paralympic Games has and will provide several opportunities to reimagine and develop new strategies and visions that can create positive legacies for the sporting landscape in Australia.



One of these areas is the development of a best practice facility strategic outline that provides guidance and purpose in the design of the facilities for people participating in sport who have a disability, impairment, or a limitation. The aim is to normalise standards so a universal planning strategy can be created for all Australians at all venues. All venues must be accessible, ensuring all people are valued under the one roof.

In developing this guidance, accessibility, impairment and inclusion **(including competitors, officials, volunteers and spectators)** will be the driving parameters for future facility developments for all without the need to develop a standalone facility for people with disabilities, impairments, or limitations.

The following outline addresses many issues, including:

1. COURT REQUIREMENTS – INSIDE AND OUTSIDE THE FIELD OF PLAY

1.1. DIMENSIONS

- **Goalball** - 18m x 9m (with 1.5m wrap around additional to this) link
- **Boccia** - 12.5m x 6m link
- **Wheelchair rugby** - 28m x 15m link
- **Wheelchair basketball** - 28m x 15m link
- **Futsal** - 40m x 20m link
- **Blind Football** – see attached
- Some sports need **"call rooms"** availability inside a venue, as this is where athletes wait prior to the game commencing, so we need to ensure there is sufficient space for a call room per court – note - boccia call rooms are not per court - there is one large call room, where all athletes for the next round are mustered and there are equipment checks
- Facilities also need to ensure there are **separate spaces for doping control and referees/ umpires,** which are separate from athlete areas (doping control sometimes takes over accessible toilets, which would then defeat the purpose)
- Need to have **"safety" space/ run-offs** around different courts, like the wrap-around required in goalball - the wrap-around should also potentially have some sort of surface which reduces slide, but can be removed as necessary (e.g., carpet tiles)
- **Glass doors** - have bright colours as the etching markings on doors, as the white/ clear etching that is common cannot be seen by people with low vision and not all eye computer devices pitch up the nuance in colour unless contrast is high.
- **Braille** - ensure it is appropriately located within a venue and to the point of reference - e.g., don't have a sign in braille in one spot when it relates elsewhere. Ensure braille is correct/ accurate with information.
- Consider making an **audio accessible layout map** for the venue's internal flows that can be easily accessed.

1.2. LIGHTING

- Need to be aware of **reflective surface** for boccia and sports for vision impaired athletes (e.g., partially sighted futsal) - this interferes with the capacity to view the lines on the court (particularly if the wood colour is similar with varnish, to the line colour)
- **Goalball and Blind Football** - standard stadium or venue lighting is suitable for play, as both sports are primarily played with athletes wearing eye shades, main lighting requirements will be for officials and spectators to see the action, which would be like other levels of lighting.
- Need to **be wary of shadows** from windows and/ or lighting sources for vision-impaired athletes
- Need to **consider post colours vis-à-vis the background colour** behind the goal, particularly for vision-impaired athletes
- **Consider the height of items** such as light switches and bathroom sinks to be accessible for people who use wheelchairs.

1.3. ACOUSTICS

- Can impact on athletes who may have **hearing loss and intellectually impaired athletes** who may have noise sensitivity
- **Soundproof panels** can reduce the impact
- Goalball is **played in silence,** so there is a **need to remove as much external noise,** e.g., noise from other sports being played in the venue, quiet air conditioning/ heating (or to be able to turn off during play). This is often the problem in sourcing a suitable venue, as most indoor stadiums have multiple courts next to each other, with other sports played at the same time, which is not suitable for goalball. Blind football is less impacted by sound, particularly as it is usually played outside; however, a location with excessive traffic or construction noise could impact play.
- Rental/ loaned/ sale of **earmuffs/ headphones,** etc. may be helpful for intellectually impaired athletes (have "emergency" kit available with these items for situations where an athlete/ volunteer experiences sensory overload)

1.4. SURFACE

- Timber surfaces (e.g., basketball courts) need to ensure **timber does not "warp"** due to heat - this impacts sports like boccia (Alternatively, the use of proper temperature controls may reduce this, but in multi-sport arenas, heat may be generated by the way it is used. e.g., wheelchair rugby and basketball tyres get very hot, which may impact wood).
- Timber surfaces **can dent** - this can impact sports like goalball and boccia, where the ball trajectory can change with even slight unevenness in the flooring
- Potentially a surface which could be **"iced" for wheelchair curling,** which is gaining ground around the world and AUS now has a WC curling mixed team. (Good sport for transitioning from a high-impact sport to a less-impact sport)

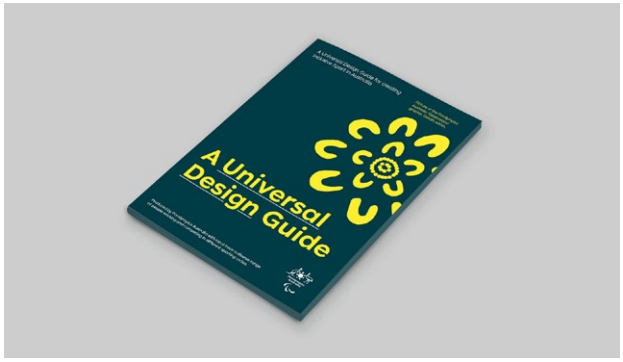
1.5. STORAGE

- **Spaces around courts** are important for sports like boccia (especially ramp players, where trollies are used to move equipment)
- Need to ensure equipment storage is **well-lit for VI athletes** and at an accessible height for athletes with wheelchair usage. No high shelves and no low shelves as a result
- Goalball and blind football have **extensive equipment requirements** - For goalball, there are 2 x 9-metre x .9 metre goals that are used on court, while these usually can be dismantled, there are usually long sections of poles that still need to be stored. For storage in blind football, there are kickboards that are used down the 2 x 40 metre side lines that need to be stored. These are usually between 1m and 1.2 metres high and each section is around 2 - 3 metres and usually folds down to flat. To cover the 2 x 40-metre side lines, there will likely be between 30 and 40 individual sections of kick boards to be stored. There are also two portable goals that will need to be dismantled and stored.
- Storage for sports such as **wheelchair rugby or basketball** must be accounted for in advance. While wheelchair basketball chairs can occasionally stack wheels, they often need to be stored, too. Supplementary bins should also be considered for storage.

2. INDOOR PARA SPORTS

Indoor Para Sports include:

« goalball
« boccia
« blind football
« badminton
« judo
« powerlifting
« taekwondo
« table tennis
« volleyball
« various wheelchair sports, including basketball, rugby, fencing and tennis.



See the following documents - PA Universal Guide and their Para Sport Technical Guidelines.

3. DEAF AND HARD OF HEARING REQUIREMENTS

Deaf and Hard of Hearing Requirements – includes hearing loops, communication, and explanation tools, acoustic barriers and captioning on screens.

In essence, deaf space design should focus on five key areas: space and proximity, mobility, acoustics and electromagnetic interference, sensory reach, and light and colour

In addition, the following should be noted: deaf people can have a range of hearing abilities and many will use assistive devices, such as hearing aids or cochlear implants, to enhance sound. These devices can often amplify reflected sound waves, which can be distracting and even painful. Designers should be aware of this and try to reduce sources of background noise and reverberation in building acoustics design.

The following points are highly recommended:

Hallways and outside sidewalks should be made wider to allow conversations to occur while walking.

Building entrances should utilise **automatic sliding doors** to enable conversations to continue while entering and exiting buildings. (Because sign language requires clear sight lines, designers can work to ensure that the spaces are free of visual clutter and obstructions)

Strobe (not suitable for people with epilepsy) or flashing lights added to building alarm systems

PA systems from reception (building/ activity announcements) include **text translation on a visual screen** where possible (e.g., sports hall).

Indoor sports/ swimming/ athletics electronic **scoreboard, including separate 'flashing light'** used for stopping the game/ attention requirement/ other (manual management by scoreboard operators)

Electronic start flashlight devices for athletics and swimming

Visual signs can be portable – scoreboard, signalling, start light systems, information, etc.

4. BLIND

Blind – **light reflection off floor surfaces can have a big impact** (particularly for line marking) - at the Penrith Valley Regional Sports Centre, the main hall had line markings which were difficult to differentiate from the colour of the wood stain - this was particularly difficult for VI athletes, but even as a sighted-person, some markings were hard to differentiate (This may require adjustment of line marking colours, including looking at the rules of each sport; or having venue markings which are not permanent and can be re-applied for different - appropriate safety padding - all athletes may be at risk of sliding off a field or into a barrier, but this risk is possibly higher for athletes with VI).

They may not be able to see **protruding landmarks** (e.g., electrical sockets) and thus be unable to adjust which part of their body hits a surface post padding/ marking vs background colour; athletes with a VI may not be able to easily differentiate equipment from the background colour (e.g., white goal posts for futsal/ handball) against a light colour wall in the background.

Having **wall colouring** which is visually very different from sports equipment, such as goal posts, can alleviate this. It may be something like a dark curtain which can be drawn across a wall (which incidentally might help the acoustic sensitivity of other athletes).

Accessibility for **guide dogs.**

5. INTELLECTUAL IMPAIRMENT (INCLUDING AUTISM)

Many II athletes have **sensitivity to noise and/ or light.** Athletes with such sensitivity may be wearing earphones, earmuffs, sunglasses, or hats to reduce the impact of the sensitivity (possibly have a point where these items can be borrowed, rented, or purchased – see above).

Other athletes will use **"fidget" devices** to reduce their sensitivity to noise/ light/ distraction. There could be a space or provision for "fidget devices" where these are permanently integrated.

Having a **"calm room" or "chill-out" space** can be vital to help people with II re-regulate their nervous system.

6. WHEELCHAIR

- Consider door openings with a **minimum entrance width of 1000mm** where possible.
- Consider **automatic doors** where possible so as not to stress athletes' bodies.
- Corridors and passageways within sports facilities should be **wide enough to accommodate people with disabilities,** including within sports facilities where sports wheelchair users and medium to large groups of people with disabilities use facilities at the same time.
- Doors to self-contained wheelchair accessible changing areas, toilets and cubicles in sports wheelchair zones should have a clear opening width of a minimum of 1000mm; and where the sports facility will potentially be used for wheelchair activities, **door width should be increased to 1200mm** to avoid the need to transfer from a sports chair to a day chair.

7. STRATEGY REVIEW

Strategy needs to be **peer reviewed by people with a variety of lived experiences** (look at working groups) - communication with the target groups is vital - "if you've met one person with a disability, you've met one person" - don't make assumptions about the needs of each community when designing venues or setting up a venue for a particular event – we need to value and use the contributions.

8. INTERSECTIONALITY OF DISABILITIES

This strategy provides access to the venues for all people regardless of their disability, noting the intersectionality of disabilities – **people may have more than one disability** – one allows for a para pathway and another separate pathway – need to accommodate all opportunities/ choices.

9. WAYFINDING

Develop and use **proper, understandable symbols** that provide directional and positional outcomes for all, including people whose first language is not English.

10. ACCESSIBILITY AT VENUES

A solution which could be deployed is **"BindiMaps"**, which is accessible on-site and virtually, so people can make plans for their route in advance of attending your venues. It has been deployed by Tennis Australia at the Australian Open, at the Melbourne Grand Prix, and at a number of major sites (e.g., airports).

A quick demo video can be found here:
https://bindimaps.com/industries-2/accessible-wayfinding-office-building/

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