

# Facility Guidelines

Creating places to play for all





## **About this document**

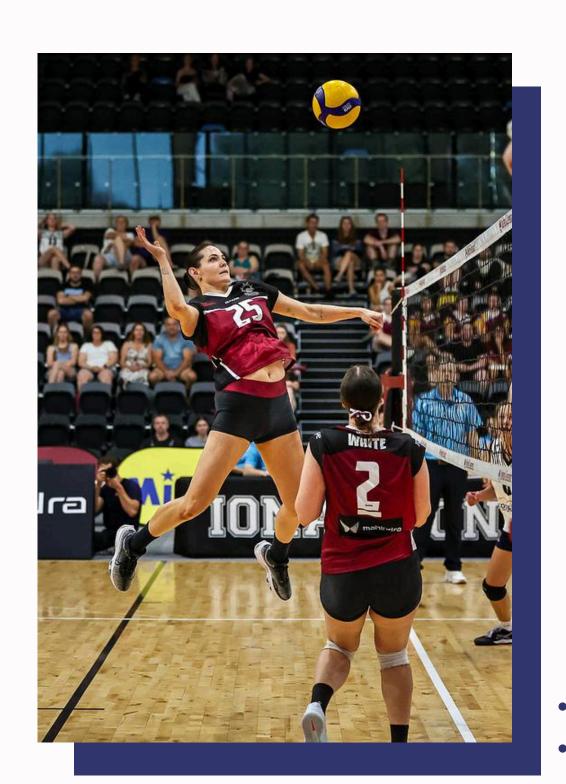
The Volleyball Queensland (VQ) Facility Guidelines ("The Guidelines") aims to provide a resource of volleyball facility requirements for use by the volleyball community, government and other stakeholders when considering and/or planning volleyball facilities.

These Guidelines play an important part of VQ's Facility Strategy. Facilities are a key component in supporting the growth of volleyball participation and attracting large scale events.

The guidelines provide facility requirements and details required for indoor, beach and grass volleyball. It outlines the required facility components based on the level played and where the facility sits within the hierarchy model (see adjacent table).

These Guidelines are intended to support stakeholders to appropriately scope, plan and design improved facilities. Volleyball facilities are diverse across Queensland and are fundamental to participating in the game of volleyball. It is critical they are provided to the highest quality and standard possible and maximise the use, enjoyment and experiences of both spectators and players no matter what level.

The guidelines have been developed based on the Federation Internationale de Volleyball (FIVB), Official Volleyball Rules 2025-2028 and the Official Beach Volleyball Rules 2021-2024. Key technical data such as Standards compliance for indoor sports floors is to be sourced from the FIVB 's Homologation Regulations. Other information has been provided by VQ.





## General Indoor Facility Design Considerations

Venue utilisation for volleyball does not have to be restricted to one volleyball court per one basketball/netball court. When an indoor sports centre is described, it often has a 'number of courts' listed, this term 'X court venue' only represents Basketball (BB) and Netball (NB) court usage. While this nomenclature is commonly applied to sports centres, it should not define its usage potential with respect to volleyball.

The utilisation of a venue with good design and fit out would allow volleyball to be delivered in various modes based on the 'level' of the competition - i.e. a 12 'court' venue will incorporate 12 volleyball courts within each of the court spaces and it should also at a minimum facilitate 16 volleyball courts - i.e. each 3 BB/NB courts could provide 3 or 4 volleyball courts.

Any volleyball layout is best thought of akin to tennis - i.e. volleyball is a net sport and so volleyballers play outside of the lines as different to netball or basketball where you must play inside the lines.

This means the space around the volleyball court while known as the freezone is part of the playing area, but the standard of play defines how much freezone is necessary beyond the minimum required 3 metres as stipulated in the rules. Again, in the tennis context, while professional tour tennis players require approximately 8 metres run off behind the baseline, a 'local club court' may only need 4 metres. In considering this principle, a well-designed sports centre can use various court configurations to best use the available space.

Any plan for multiple courts must ensure that 'separation nets' are provided at the end of courts to prevent balls coming into the court unseen, sideline to sideline 'separation nets' less so. The equipment requirement of net systems, in floor sockets, score facilities, benches, tables and floor marking also need to be considered in the scope.

While this multi-design court layout seems 'selfish' for volleyball, in terms of the venue's 'economics' it increases court hire income by at least 25% per hour with a comparable improvement in food and beverage takings as more people are in the venue each hour. It also extends the 'number of sellable hours for the venue', weekday nights (Monday, Tuesday, Wednesday, Friday) are both heavily demanded and the most restricted hours in venues, given users generally come from school or work. If volleyball, netball and basketball had the same number of teams to service over those nights, volleyball would take less overall time and so additional capacity is made available.



## General Indoor Facility Design Considerations cont...

Some examples of existing indoor sports centres which VQ utilises currently for consideration in discussing design parameters with court availability when set up for volleyball:

- The '5 court' Brisbane Entertainment Centre Sports Centre at Boondall runs on 5 or 6 courts for volleyball;
- The '8 court' Coomera Indoor Sports Centre can run on 8, 10 or 14 courts for volleyball; and
- The '15 court' Gold Coast Sports & Leisure Centre at Carrara, Hall 1 can run as 7 or 11 courts and Hall 2 can run as 8 or 10 courts for volleyball.

Examples of venues which fail in this concept are:

• Netball Arena at QSAC, as the pillars which support the roof prevent an alternate court alignment for volleyball so as to place four volleyball courts across three NB/BB courts and so denies the venue significant income.

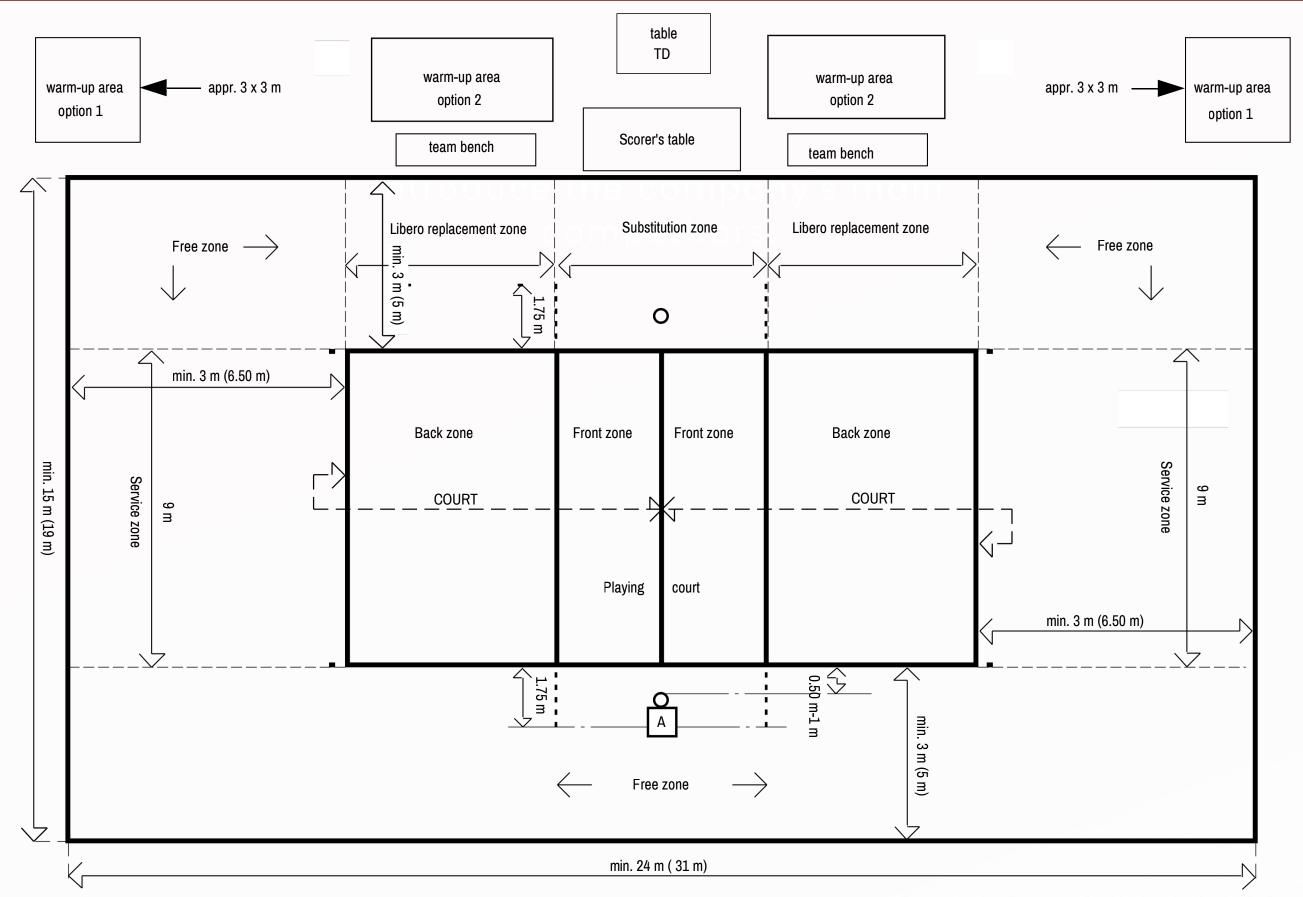
VQ staff are available to assist all facility planners with advice and input in regard to facility design for the sport and our wider experiences into venue functionality.



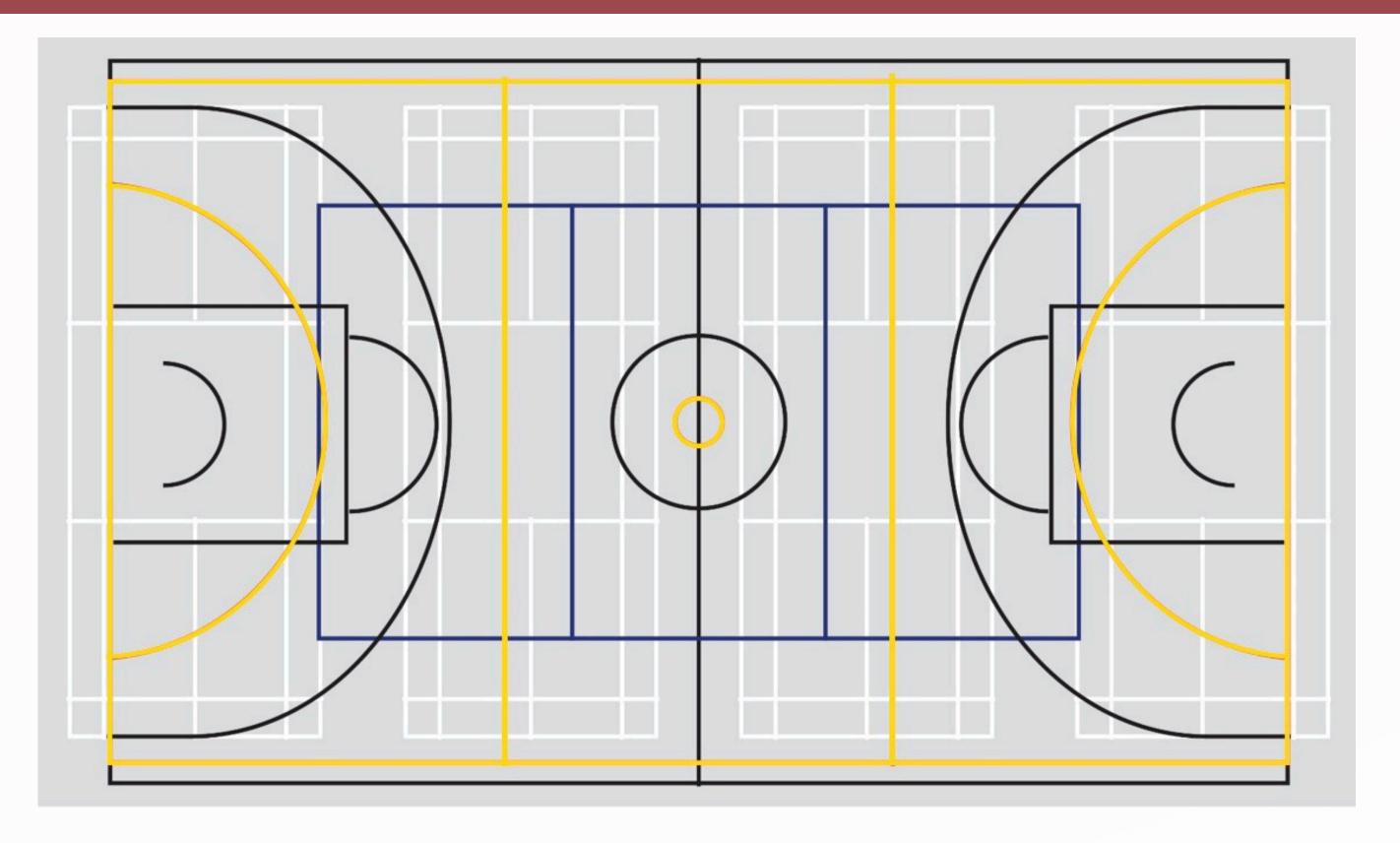
Coomera Indoor Sports Centre was retro-fitted to increase capacity from 8 volleyball courts to 14

NUMBER OF COURTS	COURT SPE	CIFICATIONS	EQUIPMENT	OTHER AMENITIES			
TIER 1 (SUITABLE FOR INTERNATIONAL & NATIONAL EVENTS) VQ'S PREFERENCE IS FOR TOP DIVISIONS OF THE QLD STATE LEAGUE TO BE PLAYED IN VENUES THAT MEET THESE SPECIFICATIONS.							
3-12 full international standard courts with provisions for volleyball posts (at least 1 show court with grandstanding).	18 x 9m surrounded with 5m side and end line free zones. Posts 1m outside the side lines.  The free playing space is a minimum of 10m high from the playing surface.  Lighting minimum 700 lux.  Wooden or synthetic surface. Lines are a light colour which is different from the colour of the floor and from any other lines (5cm wide).	<ul> <li>To host FIVB, World and Official Competitions:</li> <li>Lighting should not be less than 1000 lux measured at 1m above the surface of the playing area</li> <li>White colour line marking. Additional line markings may be required</li> <li>Temperature shall not be below 100C</li> <li>5m side and 6.5m end line free zones and 12.5m high free playing space</li> <li>Posts 1m outside the side lines</li> </ul>	<ul> <li>1 Professional quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>1 Referee stand per court with padding (1 adjustable stand for show court)</li> <li>Team benches with 10-13 chairs each per court</li> <li>Scorers table with 3 chairs per court</li> <li>Court dividing netting</li> </ul>	<ul> <li>Food/drink outlet(s)</li> <li>Licensed (or capable of being) facility</li> <li>Spectator seating</li> <li>Spectator toilet facilities for both genders</li> <li>Disabled access and facilities</li> <li>Gender equity changeroom facilities that can accommodate for 12 players and coaching staff.</li> <li>Drinking water</li> <li>Function/VIP room available</li> <li>First aid room + doping control room</li> <li>Operations/officials room/s</li> <li>Parking available on-site</li> <li>Electronic scoreboard per court</li> <li>Access to WIFI and/or wired network highly desirable</li> </ul>			
	TIER 2 (QLD STATE LEA	GUE, STATE SCHOOL EVENTS, ACADEI	MY TRAINING AND TOP DIVISIONS OF JUN	IIOR LEAGUE)			
2-6 full international standard courts with provisions for volleyball posts.	end line free zones.	Wooden or synthetic surface. Lines are a light colour which is different from the colour of the floor and from any other lines (5cm wide).	<ul> <li>1 Professional quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>1 Referee stand per court with padding</li> <li>Team benches + scorers table</li> </ul>	<ul> <li>Food/drink outlet (preferred)</li> <li>Spectator seating (preferred)</li> <li>Gender equity toilet and changeroom facilities</li> <li>Disabled access and facilities</li> <li>Drinking water</li> <li>Suitable area to be designated for First Aid/Operations</li> <li>Parking available on-site or nearby with safe access</li> </ul>			
TIER 3 (SUITABLE FOR (	CLUB/ASSOCIATION TRAININGS, REC	CREATIONAL COMPETITIONS, LOWER I		LEAGUE, KIDS VOLLEY- SPIKEZONE (BADMINTON			
1-3 standard court/s with provisions for volleyball posts.	18 x 9m, surrounded with a minimum of 3m from the side lines and end lines. The free playing space is a minimum of	Wooden or synthetic surface. Lines are a light colour which is different from the colour of the floor and from any other lines	<ul><li>1 Standard quality net per court</li><li>2 Posts per court</li></ul>	<ul> <li>Gender equity toilets and changeroom facilities</li> <li>Drinking wateravailable</li> <li>Disabled access and facilities</li> </ul>			

# Indoor volleyball courts: Specifications



# Multi lined recreation court: Tier 1 Volleyball Court

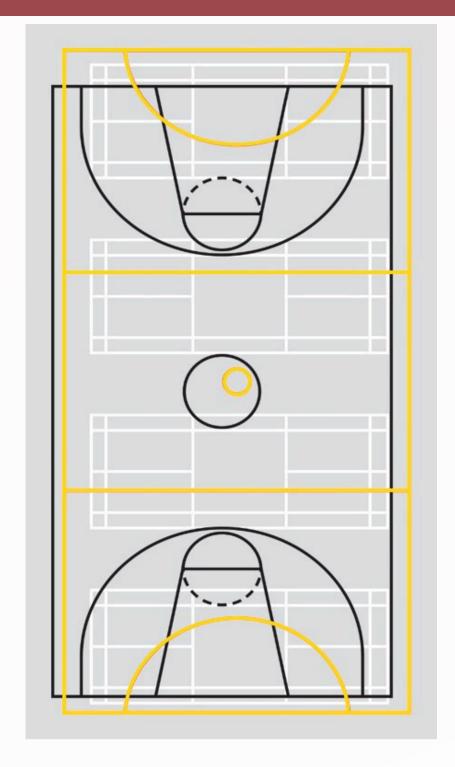


The above diagram represents a multi lined recreation court which can fit a Tier 1 volleyball court (blue line). This court is 18m x 9m in size and allows for the required free zones of 5m each side and 6.5m at the baseline.

## Multi-line recreation court: Tier 2/3

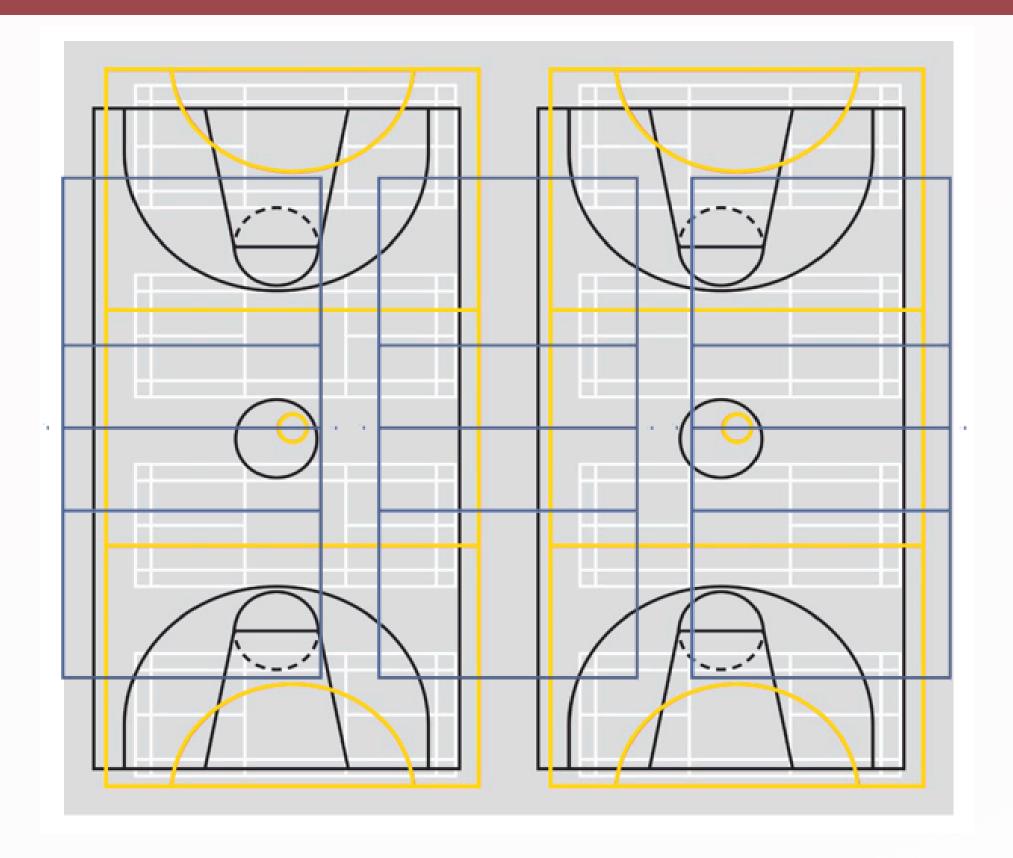
Dependent on the court size(s) and available run off, 2 x Tier 2/3 courts can fit onto one indoor court when positioned horizontally. Tier 2 courts require a total length (including free zones) of 24m and width of 15m each and Tier 3 would require a total length of 24m and width of15m. This configuration can occur when the facility has more then 1 indoor court or has a large run off area surrounding 1 court.

## Kids Volley court layout: 4 x badminton court size



Kids Volley- Spikezone games are usually played on badminton size courts. Therefore the above diagrams shows that 4 courts can fit onto one indoor court.

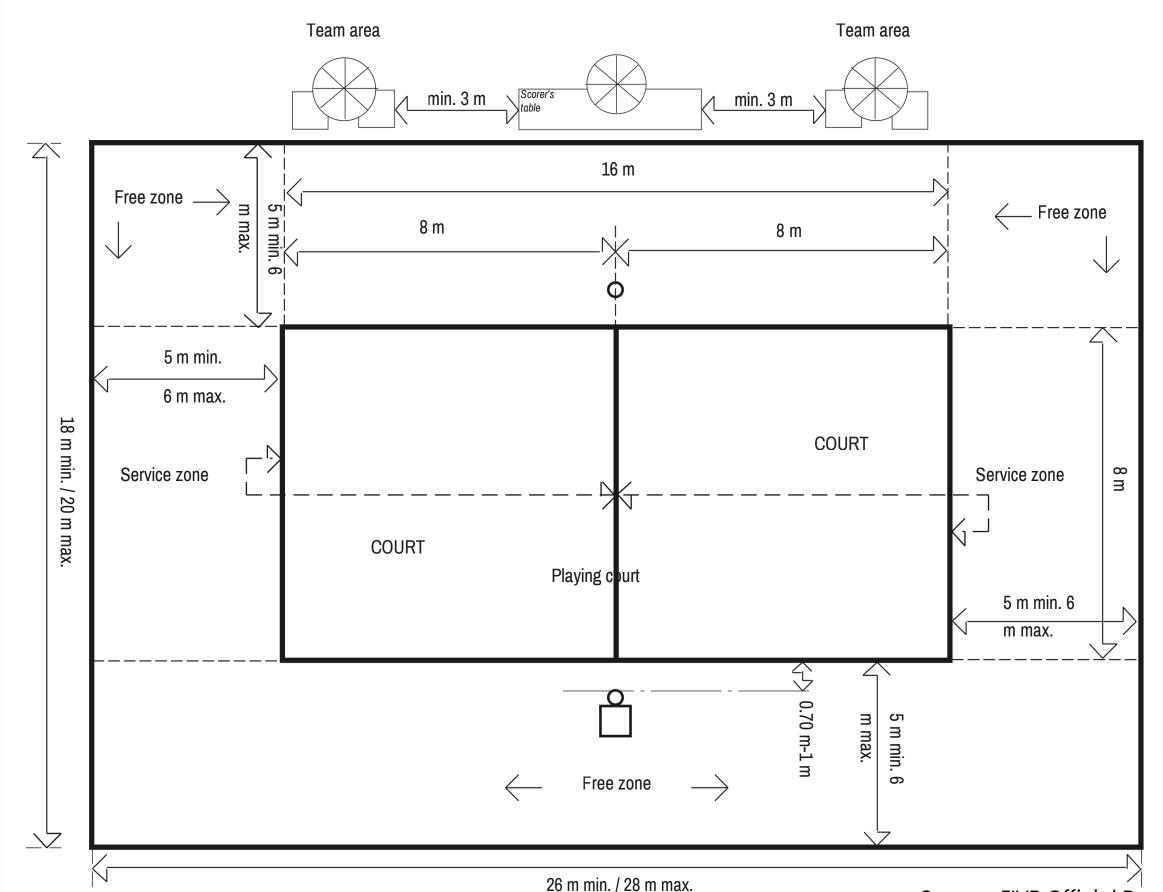
## Multi lined recreation court: Tier 3 Volleyball Court



Dependent on the court sizes and available run off, 3 x Tier 3 volleyball courts can fit onto two basketball courts when positioned vertically. Each tier 3 court would require a total length of 24m and width of 15m. Each court should have their own pair of posts (no joint posts).

NUMBER OF COURTS	COURT SPE	CIFICATIONS	EQUIPMENT	OTHER AMENITIES		
TIER 1 (SUITABLE FOR NATIONAL AND STATE TOUR EVENTS OR BEACH VOLLEYBALL MAJOR FIT FOR PURPOSE VENUE)						
3-10 full national standardcourts. Permanent posts provided which can be adjusted to the required net height.	16 x 8 m, surrounded by a free zone 5m-6m from the end lines/side lines. Posts 0.70 -1m outside lines.  Free playing space is a minimum of 12.5m high from the playing surface.  Levelled sand, 40cm deep, as flat and uniform as possible, free of rocks, shells and unsafe materials.	<ul> <li>To host FIVB, World and Official Competitions:</li> <li>5m-6m free zone</li> <li>12.5m high free playing space</li> <li>Must be at least 40cm deep and composed of fine loosely compacted grains</li> <li>Lighting 1000 to 1500 lux measured at 1m for night games</li> </ul>	<ul> <li>1 Professional quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>1 dark boundary line (5cm wide)</li> <li>4 sand anchors</li> <li>1 Referee stand per court with padding</li> <li>Team benches with 2-3 chairs each per court</li> <li>Scorers table with 2 chairs per court</li> </ul>	<ul> <li>Food/drink outlet(s)</li> <li>Access to runningwater</li> <li>Access to electricity</li> <li>Ability to secure licensed area for VIP tent/s or a known onsite (venue)</li> <li>Space for Grandstands enclosing Show Court/s of spectator tables/chairs under shelter</li> <li>Gender equity toilet and change-room facilities</li> <li>Disabled access and facilities</li> <li>Space for event marquees e.g. VIP, First Aid, Operations, Media, Doping Control</li> </ul>		
TIER 2 (SUITABLE FOR M.	AJOR SCHOOLS BEACH FESTIVALS,	STATE BEACH SERIES EVENTS, SATELL	ITE RECREATIONAL BEACH VOLLEYBALL FIT F	OR PURPOSE VENUE AND ACADEMY TRAINING		
2-8 full national standard courts and/or plus space for up to 20 temporary courts to be set up.  Permanent posts provided for 3-8 courts which can be adjusted to the required net heights.	16 x 8 m, surrounded by a free zone 3m from the end lines/side lines.  The free playing space is a minimum of 8.5m high from the playing surface.	Levelled sand, as flat and uniform as possible, free of rocks, shells and unsafe materials.	<ul> <li>1 Professional quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>1 Referee stand with padding for show court</li> <li>1 dark boundary line (5cm wide) per court</li> <li>4 sand anchors per court</li> <li>1 portable Beach Kit per temporary court</li> </ul>	<ul> <li>Food/drink outlet(s) nearby (preferred)</li> <li>Access to running water (preferred)</li> <li>Access to electricity (preferred)</li> <li>Gender equity toilet and change-room facilities</li> <li>Disabled access and facilities</li> <li>Tables/chairs under shelter (preferred for venue)</li> <li>Space for event marquees e.g. Operations/First A (n/a for venue)</li> </ul>		
•	TIER 3 (SUITABLE FOR MINOR SCHO	OLS BEACH FESTIVALS, SOCIAL SERIES	S EVENTS AND KID VOLLEY-SPIKEZONE (BAD	MINTON SIZED COURTS)		
1-12 mixture of permanent/temporary courts Temporary or permanent nets and poles provided for 1-12 courts which can be adjusted	16 x 8 m, surrounded by a free zone 3m wide on sides for permanent courts, and 2m for temporary courts.  The free playing space is a minimum of	Levelled sand, as flat and uniform as possible, free of rocks, shells and unsafe materials.	<ul> <li>1 standard quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>1 dark boundary line (5cm wide) per court</li> </ul>	<ul> <li>Food/drink outlet(s) nearby (preferred)</li> <li>Access to running water (preferred)</li> <li>Access to electricity (preferred)</li> <li>Gender equity toilet and change-room facilities</li> <li>Disabled access and facilities</li> </ul>		

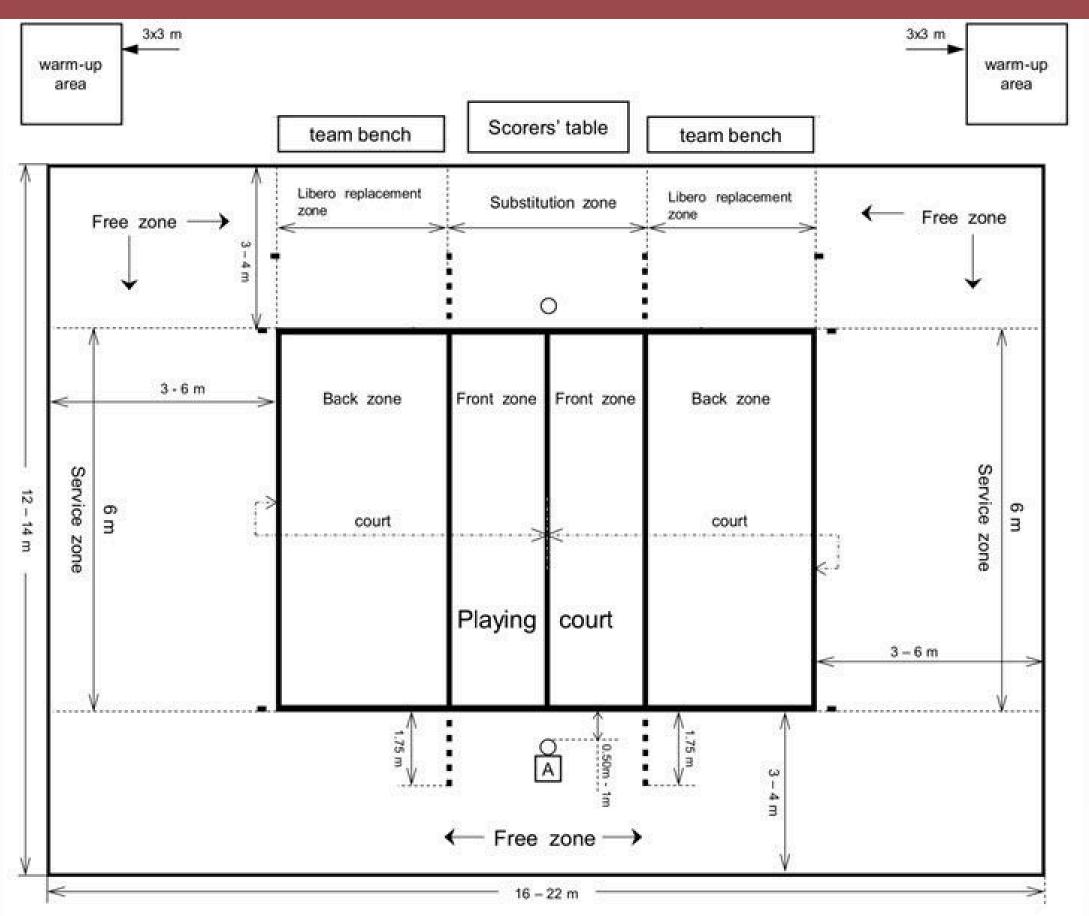
## Beach volleyball courts: Specifications



NUMBER OF COURTS	COURT SPE	CIFICATIONS	EQUIPMENT	OTHER AMENITIES
		TIER 1 (SUITABLE FOR MAJ	OR GRASS EVENTS)	
and temporary standard courts.  Temporary or permanent nets and poles provided which can	16 x 8 m, surrounded by a free zone 3m wide on sides  Free playing space shall measure a minimum of 7 m in height from the playing surface. Tree overhang and bush clearance.	The surface must be composed of grass, free of rocks, sticks and anything else which can represent risks of cuts or injuries to the players.	<ul> <li>1 standard quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 antennae per court</li> <li>1 boundary line with anchors</li> </ul>	<ul> <li>Food/drink outlet(s)</li> <li>Access to runningwater</li> <li>Access to electricity</li> <li>Ability to secure licensed area for VIP tent/s or access to onsite Club rooms</li> <li>Space for grandstands enclosing Show Court/s or spectator tables/chairs under shelter</li> <li>Access to gender equity toilet and change-room facilities including disabled amenities (onsite for venue)</li> <li>Space for event marquees e.g. VIP, First Aid, Operations, Media (n/a for venue)</li> </ul>
	TIE	R 2 (SUITABLE FOR MINOR GRASS EVE	NTS OR REGULAR COMPETITIONS)	
courts to be set up.	16 x 8 m, surrounded by a free zone 3m wide on sides.  The free playing space is a minimum of 7m high from the playing surface.	The surface must be composed of grass, free of rocks, sticks and anything else which can represent risks of cuts or injuries to the players.	<ul> <li>1 standard quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 antennae per court</li> <li>1 boundary line with anchors</li> <li>1 portable grass kit per temporary court</li> </ul>	<ul> <li>Food/drink outlet(s) nearby(preferred)</li> <li>Access to running water(preferred)</li> <li>Access to electricity(preferred)</li> <li>Access to gender equity and disability toilet and change-room facilities including disabled amenities</li> <li>Space for event marquees e.g. Operations/First Aid</li> </ul>
	TIER 3 (SUITABLE FOR R	REGULAR SOCIAL COMPETITIONS AND	EVENTS AND SPIKEZONE (BADMINTON SIZE	ED COURTS)
1-12 temporarycourts.	16 x 8 m, surrounded by a free zone 3m wide on sides  The free playing space is a minimum of 7m high from the playing surface.	The surface must be composed of grass, as flat and uniform as possible, free of rocks, sticks and anything else which can represent risks of cuts or injuries to the players.	1 portable Grass kit / Spikezone kit per court	<ul> <li>Access to running water(preferred)</li> <li>Access to gender equity toilet and change-room facilities including disabled amenities nearby</li> </ul>

NUMBER OF COURTS	COURT SPE	CIFICATIONS	EQUIPMENT	OTHER AMENITIES
		TIER 1 (SUITABLE FOR MA	JOR GRASS EVENTS)	
3-12 full international standard courts with provisions for volleyball posts (at least 1 show court with grandstanding).		<ul> <li>To host FIVB, World and Official Competitions:</li> <li>Lighting should not be less than 1000 lux measured at 1m above the surface of the playing area</li> <li>White colour line marking. Additional line markings may be required</li> <li>Temperature shall not be below 160C</li> <li>4m side and 6m end line free zones and 10m high free playing space</li> <li>Posts 1m outside the side lines</li> </ul>	<ul> <li>1 Professional quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>Team benches with 10-13 chairs each per court</li> <li>Scorers table with 3 chairs per court</li> </ul>	<ul> <li>Food/drink outlet(s)</li> <li>Licensed (or capable of being) facility</li> <li>Spectator seating</li> <li>Spectator toilet facilities for both genders</li> <li>Disabled access and facilities</li> <li>Gender equity changeroom facilities that can accommodate for 12 players and coaching staff</li> <li>Drinking water</li> <li>Function/VIP room available</li> <li>First aid room</li> <li>Operations/officials room/s</li> <li>Parking available on-site</li> <li>Electronic scoreboard</li> <li>Access to WIFI and/or wired network highly desirable</li> </ul>
	TIER 2 (QLD STATE LEA	GUE, STATE SCHOOL EVENTS, ACADE	MY TRAINING AND TOP DIVISIONS OF JUN	IOR LEAGUE)
2-6 full international standard courts with provisions for volleyball posts.	10 x 6m surrounded with 3m side and end line free zones.  The free playing space is a minimum of 8.5m high from the playing surface.  Lighting minimum 700 lux.	Wooden or synthetic surface. Lines are a light colour which is different from the colour of the floor and from any other lines (5cm wide).	<ul> <li>1 Professional quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> <li>1 Referee stand per court with padding</li> </ul>	<ul> <li>Food/drink outlet(preferred)</li> <li>Spectator seating(preferred)</li> <li>Gender equity toilet and changeroom facilities</li> <li>Disabled access and facilities</li> <li>Drinking water</li> <li>Suitable area to be designated for FirstAid/Operation</li> <li>Parking available on-site or nearby with safe access</li> </ul>
TIER 3 (SUITABLE FOR	CLUB/ASSOCIATION TRAININGS, RE	ECREATIONAL COMPETITIONS, LOWER	DIVISIONS AND JUNIOR LEAGUE, KIDS VO	LLEY- SPIKEZONE (BADMINTON SIZED COURTS)
1-3 standard court/s with provisions for volleyball posts.	18 x 9m, surrounded with a minimum of 3m from the side lines and end lines.  The free playing space is a minimum of 7m high from the playing surface.	Wooden or synthetic surface. Lines are a light colour which is different from the colour of the floor and from any other lines (5cm wide).	<ul> <li>1 Standard quality net per court</li> <li>2 Posts per court</li> <li>2 Post pads per court</li> <li>2 Antennae per court</li> </ul>	<ul> <li>Gender equity toilets and changeroom facilities</li> <li>Drinking water available</li> <li>Disabled access and facilities</li> <li>Suitable area available for first aid/operations</li> <li>Nearby and safe access parking available</li> </ul>

# Sitting volleyball courts: Specifications





## **Additional Resources**

- FIVB Official Indoor Volleyball Rules 2025-2028 (Chapter 1)
  https://www.fivb.com/en/volleyball/thegame\_glossary/officialrulesofthega
  mes
- FIVB Event Regulations-Indoor (Chapter 4)
  https://www.fivb.com/-/media/2020/fivb%20corporate/fivb/legal/event%2
  0regulation/updated/fivb%20event%20regulations%20202020201113clean.pd
  f?la=en&hash=6406948D18B0915DA35E8DC9725D47AD
- FIVB Official Beach Volleyball Rules 2021-2024 (Chapter 1)
  https://www.fivb.com/en/beachvolleyball/thegame\_bvb\_glossary/officialr
  ulesofthegames
- FIVB Beach Volleyball Handbook (Chapter 3)
  http://www.fivb.org/EN/BeachVolleyball/Document/2020/Handbook/2019\_
  Handbook\_Clean.pdf
- Volleyball USA- Beach Court Construction
   https://www.volleyballusa.com/how-to-build-your-own-sand-court/
- FIVB Official Sitting Volleyball Rules 2022-2024 (Chapter1)
  https://www.worldparavolley.org/wp-content/uploads/2021/11/Official-Sitting-Volleyball-Rules-2022-2024.pdf





Creating places to play for all

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