

## 

## **FACILITY GUIDELINES**

Helping Local Communities Create Quality Cricket Facilities



2023

### FOREWORD

I am delighted to introduce Cricket Australia's updated Community Cricket Facility Guidelines ('The Guidelines') — a document detailing recommendations, considerations and preferred requirements for the provision and development of new, as well as enhancement of existing community cricket environments across Australia.

The Guidelines are a refreshed version of the original document released in 2015 which was the first collective and cohesive set of cricket facility and infrastructure related information available to Australian Cricket, government and communities.

Cricket has evolved significantly since 2015 and so have our game's facility and supporting infrastructure requirements. More women and girls are participating, there are shorter versions of the game increasing the amount of power hitting, and there are greater programming opportunities and modified programs at the entry level. We also face greater challenges from more regular climatic events while community preferences continue to evolve following the pandemic. All of these factors impact and influence the way in which facilities and resources need to be delivered and managed.

Facilities and infrastructure are vital in supporting the development and growth of the game, as well as contributing to a player's first experience. It is also important that we ensure our officials, spectators and volunteers are provided with appropriate facilities to play their roles. Without fit for purpose, safe, accessible and inclusive facilities to accommodate our diverse cricket community, we simply cannot grow and improve our great game.

The Guidelines represent an important part of Australian cricket's investment in community cricket. A sustainable future is one of Australian Cricket's four strategic pillars for supporting and growing the game. 'Driving investment in venues and facilities that enhance experiences and enrich communities' is one of ten organisational wide strategic priorities.

With more than 6,000 locations across Australia that host and facilitate community cricket activities, further work is required to improve the facilities across the network. These Guidelines provide an important step in the process, and with extended support from the Australian cricket community and stakeholders, we look forward to continuing to provide the best possible experiences and ensure that cricket is accessible and inclusive for all.

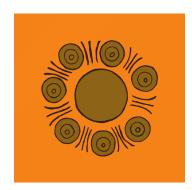
**Nick Hockley** CEO, Cricket Australia



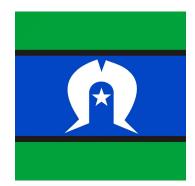
## ACKNOWLEDGEMENT OF COUNTRY

Cricket Australia acknowledges the Traditional Owners and Custodians of the lands on which we are privileged to live, work and play the great game of cricket. We recognise and celebrate their ongoing connection to culture, community and Country. We pay our respects to Elders past and present.









Walkabout Wickets, by Kirrae Whurring artist Fiona Clarke, represents cricket stars past, present and future, and the meeating places where they play. Fiona is a descendant of James 'Mosquito' Couzens and his brother Johnny Cuzens, members of the first Australian cricket team who toured England in 1868.

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# SECTION 1 INTRODUCTION

#### **About the Guidelines**

Cricket Australia's Community Cricket Facility Guidelines ('the Guidelines') aim to provide a consolidated technical resource to aid the planning, design and development of community cricket infrastructure. Information included within the Guidelines will assist the Australian cricket community and our network of partners and stakeholders to continue to deliver quality, inclusive and fit-for-purpose facilities.

This 2023 edition of the Guidelines builds on the content provided within the original 2015 edition, and provides updated, refreshed and new information relevant to cricket facility provision. This edition of the Guidelines also provides an enhanced focus on the importance of inclusion, maintaining infrastructure and the incorporation of environmentally sustainable design principles into all projects.

Information provided within the Guidelines represents a national view of community cricket facilities. While research and care has been taken in their preparation, there are likely to be State, Territory or local considerations that are unique to specific areas. In all instances where unique considerations are relevant, these and other associated local conditions, rules or regulations should be referenced prior to embarking on any facility related project.

The Guidelines are provided in three distinct sections.

#### Section 1: Introduction, background and context

Section 1 provides an introduction to the Guidelines, relevant background and guidance on how best to use them to maximise their value. It also provides an overview of Australian Cricket's 2022-2027 key strategic focus areas and outlines the community cricket facility hierarchy.

#### Section 2: Project planning

Section 2 provides an overview of the recommended stages of project planning and delivery. It provides a high-level summary at each stage, the critical tasks and considerations for each and identifies the typical stakeholders and partners to engage and involve. Project planning is essential to the delivery of quality, efficient and well managed projects and budgets and is a must read for anyone embarking on a cricket infrastructure project.

#### Section 3: Technical information and guidance notes

Section 3 provides a series of Guidance Notes that provide detailed technical information on various elements of facility provision. Each guidance note provides information on recommended processes, technical requirements and planning considerations. Topics covered in Section 3 include:

- Guidance Note 01 Playing Field
- Guidance Note 02 Pitches
- Guidance Note 03 Outdoor Training Facilities
- Guidance Note 04 Indoor Training Facilities
- Guidance Note 05 Indoor Cricket
- Guidance Note 06 Floodlighting
- Guidance Note 07 Pavilions and Change Facilities

#### How to use the Guidelines

The Guidelines provide cricket specific planning and design advice to State and Territory Cricket Associations, Clubs and Associations, Local Councils, State Government departments, planners, consultants, industry suppliers, developers, schools and other peak sporting bodies.

Cricket Australia recommends that all stakeholders involved in the planning, design, construction, management, maintenance and use of community cricket facilities refer to these Guidelines when initiating new or revisiting existing projects. It is important that the Guidelines are read and referenced from the outset of each cricket facility project to ensure cricket's priorities are considered and relevant principles embedded through all project phases.

The content provided within these Guidelines makes reference to a number of mandated building and construction standards and regulations, which refer to 'essential industry requirements' for relevant projects.

Cricket specific standards, preferred designs and known best practice examples (at the time of writing) are provided as a guide only. Cricket specific references (unless mandated via industry standards) should not be viewed by stakeholders as 'essential requirements or necessary improvements' to be delivered across all existing venues used for community cricket.

The intent of the Guidelines is not to bring every existing community cricket facility up to the same level and standard, but to provide the necessary information to enable cricket infrastructure projects to be planned and delivered in a consistent way across the country.

It is important for the Guidelines to be read and implemented in conjunction with other existing sporting code guidelines and associated industry standards and requirements to ensure facilities are maximised for shared community and/or multi-use. In addition to content outlined within the Guidelines, consideration of local playing conditions or regulations administered by local cricket associations (or providers) should be adhered to and accommodated into venue planning and development where appropriate.

Note: Content within the Guidelines will be reviewed periodically and may be subject to change. If utilising a hard copy, it is recommended it be cross referenced with the online version located at:

#### **Hints and tips**

Throughout the Guidelines references are made to highlight key tips, examples, principles and key considerations for projects. Look out for the following icons throughout the Guidelines, they are there to help identify the critical elements of project planning, design, delivery and maintenance.



TIPS

Important information for consideration in all projects. Tips provide a quick reference guide and help to highlight critical aspects of facility and venue planning and design.



References or links to additional information that may support your project or provide additional detail or context to support the Guidelines.

The Guidelines contain comments and information of a general nature only and are not provided as a substitute for professional advice. Site specific research, technical assessment and local interpretation and implementation of the Guidelines is required.

Every effort has been made to ensure the accuracy of the information contained in these Guidelines. However, Cricket Australia and the State and Territory Cricket Associations (collectively, Australian Cricket) make no warranty that the material contained within will be free from error.

Australian Cricket makes these Guidelines available on the understanding that you will exercise your own skill, care and judgment with respect to their use and you will carefully evaluate the accuracy, currency, completeness and relevance of the material for your purposes.

Any party who makes use of any part of these Guidelines in the planning and/or development of cricket facilities (User) does so at its own risk and Australian Cricket disclaims, and User releases Australian Cricket from, all liability, howsoever arising, for any loss, damage or injury directly or indirectly sustained by any person as a result of any reliance upon (including reading or using) these Guidelines.

Adherence with information detailed in these Guidelines by a User does not of itself mean that the User will be complying with all legal obligations.

Reading or use of these Guidelines by a User constitutes acceptance of the terms of this disclaimer by that User.

The User acknowledges that the information outlined in this document is effective from 31 October 2023 and that Cricket Australia reserve the right to amend, update or delete sections of these Guidelines at any time as it deems necessary.

#### **Definitions**

The following definitions are provided to help explain generic terms referenced throughout the Guidelines.

Term	Term Definition
ASSOCIATION	Organisation usually comprised of member clubs, responsible for organising and administering local cricket competitions.
BASE	The part of a cricket pitch or practice pitch area on which the synthetic surface is applied.
BUSINESS PLAN	A formal statement of club or venue goals and an action plan for reaching those wgoals.
CAPITAL REPLACEMENT PROGRAM	A statement of all the required tasks, responsibilities and costs that should be taken into consideration regarding infrastructure development and renewal.
CONTINGENCY BUDGET  Contingency budget is an amount of money that is included project budget to cover potential events that are not specific accounted for in a cost estimate (e.g. material cost increases, unforeseen project works, scope variations).	
ESD	Environmentally Sustainable Design (ESD) principles aim to improve the health and comfort of buildings and surrounding environments for users whilst at the same time reducing negative impacts on the environment.

Term	Term Definition
GEOTECHNICAL ENGINEER	A Geotechnical Engineer is a specialist qualified to prepare a geotechnical report that typically reports on factors such as soil type, composition and quality, compaction and moisture levels.
GREENFIELD SITE	An undeveloped site earmarked and suitable for future development.
HERITAGE ADVISOR	A person appropriately qualified in a discipline relevant to the management of Aboriginal cultural heritage (such as anthropology, archaeology or history) or who has extensive experience or knowledge in relation to the management of Aboriginal cultural heritage.
ILLUMINANCE	The total amount of visible light illuminating a point on a surface from all directions above the surface. The standard unit for illumination is Lux.
INDOOR CRICKET	Refers to the sport and activity of competitive cricket played indoors. It has its own set of facility criteria, rules and regulations.
INDOOR TRAINING	Refers to non-competition training and skill development activities participated in an indoor venue suitable for cricket practice.
LIFECYCLE COST	A comparison of not only the initial capital cost for specific facility elements, but an analysis of ongoing usage, maintenance and replacement costs.
LUMINAIRE	The housing that contains a floodlight lamp and includes the lamp, reflector and the lens.
PLAY HQ	PlayHQ is Cricket Australia's national membership registration system and competition management software platform.
PROJECT MANAGER	A suitably qualified expert who is engaged by a client (likely to be Club, Council or Association) to oversee the design and construction phases of a project.
PAVEMENT	A term used to describe an asphalt or concrete pitch base.
PILE	The fibre material that forms the playing surface in synthetic turf pitches and playing areas.
PITCH	The central flat strip of a cricket field that accommodates the main batting and bowling activities. Typically pitch surfaces are either natural turf or synthetic turf.
STATE/TERRITORY ASSOCIATION	The peak governing body for cricket provision, development and administration within each individual State and Territory in Australia – State/Territory Associations are all affiliated with Cricket Australia.
SYNTHETIC GRASS/TURF (PITCH)	Collective term applied to outdoor artificial cricket pitch surfaces.
SYNTHETIC GRASS/TURF (FIELD)	Collective term applied to outdoor synthetic grass products jointly approved for use by Cricket Australia and the Australian Football League (AFL) for use on cricket ground infields and outfields.
TURF (PITCH)	Natural grass cricket pitch surface that is specifically prepared and manicured by specialist curators.
UNIFORMITY	This is a measure of light of a cricket ground. It is important as it measures the difference (and consistency) between bright and dark areas.

#### Strategic context

#### Where the Game Grows 2022-2027

Where the Game Grows is a five-year strategic plan for Australian cricket. It is underpinned by the ultimate belief that cricket is truly a game for all; one that has incredible power to bring people together and benefit society, both on and off the field.

It celebrates and respects our proud history while looking bravely toward the future as we seek to drive bold, transformative change in digital experiences, junior participation, culturally diverse inclusion, gender equality, sustainability, reimagining the W/BBL, player connection through story-telling and playing our part in developing the game globally.

Cricket Australia's purpose and vision have been redefined through the strategic plan:

- Purpose: To unite and inspire everyone to love and play cricket.
- Vision: A sport for all that makes Australians proud.

Four strategic pillars and ten strategic priorities have been identified to guide organisational planning and focus and to ensure available resources are provided across the areas where they are needed most and will provide a long-lasting legacy and impact.

#### Community cricket facility hierarchy

Australian cricket's community cricket facility hierarchy defines each level of community cricket facilities, their purpose and the core cricket programs and activities they typically cater for. The community cricket facility hierarchy does not include facilities provided at the domestic, first class or international level.

The community cricket facility hierarchy is referenced throughout the Guidelines and can be used to better understand and connect levels of use and play with the recommended levels of facility and amenity provision. While the hierarchy provides an overarching structure for facility provision and use, it is important to note that each individual venue and its related infrastructure and usability is likely to be influenced by a number of factors, including local competition or Association requirements and rules.

Local Government and State-Territory planning schemes, policies, capital improvement budgets, recreation priorities, risk management, occupancy agreements and associated site influences (e.g. ground sizes, neighbouring properties) will all play a role in each venue being able to achieve the recommended facility and amenity levels identified within the hierarchy.

The following table provides an overview of the community cricket facility hierarchy, including venue level, their purpose, core cricket and other compatible uses.

HIERARCHY LEVEL	Facility purpose	Core cricket use	Other compatible uses
PREMIER	Facilities primarily service Premier Clubs and facilitate the linkage between local level community cricket and underage representative competitions with the talent pathway.	Premier Club's home ground or grounds to conduct home and away fixtures and club training activities.	Regional training venue for pathway squads and programs. Event/carnival venue for representative state and regional level programs and competitions. Likely to be shared with a winter tenant.
CLUB (HOME)	Provide a mix of recreational and competitive cricket opportunities within a community club environment for local communities – clubs and venues connect with their associated turf or synthetic competition and pathway structure (for all age groups).	A club's home ground that facilitates home and away fixtures for local community (metropolitan and country) cricket in each State and Territory.  Venues support local club training, promote school to club connectivity and provide opportunities for Junior Cricket Stages (1,2 and 3) and modified programs such as Cricket Blast.	Training facilities and social amenities are provided to promote social activity and community use. Shared venue with a winter and other alternative tenants.  Open and Under-age Association competition venue or finals venue at key locations within an Association or across a geographical area.
CLUB (SATELLITE)	Provides opportunities for club and school competition and social/recreational cricket. Venues often used as secondary or overflow grounds for junior and lower-level senior grades.	Satellite or overflow venues away from a club's main home ground that support school, junior and senior community club cricket competition (primarily match day use) and formal and informal social cricket use.	Venues typically include parks, recreation reserves and schools and are often shared venues for broader community use.  School sites also provide access to cricket opportunities through school curriculum, after school programs, school teams and for recreational use by school students and the local community.

## AUSTRALIAN GRICKET'S

## STRATEGIC PLAN 2022–2027

## STRATEGIC PILLARS



## **BRILLIANT EXPERIENCES**

Globally leading fan, player and volunteer experiences that create excitement and inspire passion

#### STRATEGIC PRIORITIES

- 01. Develop outstanding digital and live experiences that WOW our customers
- 02. Grow the WBBL and BBL as the ultimate summer sport and entertainment proposition



## INSPIRATIONAL PLAYERS & TEAMS

Our players and teams are successful, inspiring and reflect the values and aspirations of the community they represent

#### STRATEGIC PRIORITIES

- o5. Enhance our leading international and domestic competitions, systems and programs that develop great players, coaches and match officials
- O6. Strengthen connection with cricket's past and present role models whose performances and stories inspire our nation



UNITED AND ALIGNED
AUSTRALIAN CRICKET SYSTEM

PEOPLE, CULTURE & CAPABILITY

## PURPOSE

To unite and inspire everyone to love and play cricket

## VISION

A sport for all that makes Australians proud



## PARTICIPATION GROWTH

Inspire more play by supporting volunteers and ensuring cricket is fun, accessible and welcoming for everyone

#### STRATEGIC PRIORITIES

- 03. Attract kids (ages 5-12) and families from all backgrounds to inspire a lifelong love of cricket
- 04. Accelerate momentum to be the leading sport for women and girls



#### SUSTAINABLE FUTURE

Ensure the financial prosperity of Australian cricket while creating positive social impact and being a leader in the global game
STRATEGIC PRIORITIES

- 07. Embed a business model that is sustainable, cost efficient, diversified and always innovative in its thinking
- 09. Champion inclusion, positive social impact and sustainability
- 08. Drive investment in venues and facilities that enhance experiences and enrich communities
- Support growth of cricket globally and inclusion at Brisbane 2032

PURPOSE-LED PARTNERSHIPS

DATA & ANALYTICS





# SECTION 2 PROJECT PLANNING

#### Section 2: Project planning

Project planning is essential to the delivery of quality, efficient and well managed projects and budgets and is a must read for anyone embarking on a cricket infrastructure project.

All projects, no matter the size, need to be planned. The following staged planning process and principles will assist to create successful project outcomes, ensure you get what you want and paid for, and help to evaluate whether you achieved your project goals.

In addition to aligning your project with the following staged process, it is important to evaluate your project budget through all stages of planning. Budgets can escalate through all stages, even with minor changes and additions, and can become problematic or ultimately prohibitive to project progress if not managed effectively.

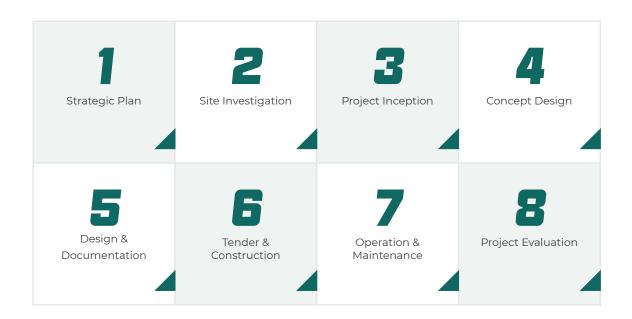
Your project budget will ultimately guide project outcomes and what can be delivered, so don't underestimate all costs involved as last-minute surprises will always cost more to resolve than if they were considered at the start of a project.



Adopting a 5–10% contingency to cover any potential events that are not included within your project budget is a common project risk mitigation strategy and highly recommended. Unexpected events or costs may typically include cost increases to materials or labour, variations to project scope or unforeseen works during construction. Planning for these potential costs in advance helps to ensure your project is still delivered within budget parameters. It also helps ensure you are not trying to secure additional budget or funding during or post construction, risking delays or ongoing financial implications.

#### Project planning and delivery stages

It is highly recommended that all infrastructure development projects follow the staged planning processes below. The degree of detail and resources required at each project planning and delivery stage should also align with the size, scale and specific needs of your project. Engagement of key stakeholders at each stage is also essential to ensuring a coordinated and collaborative approach to project delivery.



PROJECT STAGE	Description	Key stakeholders to be involved
STAGE 1 STRATEGIC PLAN	<ul> <li>A project / site has been identified as part of a master plan, in a local council strategy or as part of a peak sporting body strategic/facilities/infrastructure plan</li> <li>Consultation to confirm community needs beyond cricket and other sporting partners</li> <li>Project is supported by club / operator Business Plan</li> <li>Site has been earmarked as part of a precinct structure plan or broader development</li> </ul>	<ul> <li>Landowner</li> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Local Communities</li> <li>Funding Partners</li> <li>State or Territory Cricket Associations</li> </ul>
STAGE 2 SITE INVESTIGATION	Undertake relevant investigations to confirm the appropriateness of the site.  Note that these investigations may need to be undertaken by specialist consultants and may have cost and/or timeframe implications. Not all investigations are relevant for every project. Council and/or specialist consultants will be able to advise of these requirements.  Obtain landowner consent  Undertake a Certificate of Title search including details of all easements and covenants  Statutory Planning advice  Heritage advice  Cultural Heritage advice and development of Management Plan (CHMP) by a Heritage Advisor  Flooding / Bushfire advice – consider if there has been a history of flooding, bushfire or other natural disaster in the area or whether modelling suggests the site is likely to flood in the future  Geotechnical investigation  Soil contamination assessment and development of management plan  Hazardous material assessment and development of management plan  Pail before you dig (www.byda.com.au)  Services trace to assist with determining location of existing underground services  Engineering advice to understand capacity of existing electrical power supply  Arboricultural advice (trees)  Ecologist advice (vegetation removal)  Advice from power and gas authority regarding connection requirements  Advice from water and sewer authority regarding connection requirements  Advice from Council on legal point of discharge (storm water)	<ul> <li>Landowner</li> <li>Local Government</li> <li>Architect</li> <li>Technical Consultants</li> <li>State or Territory Cricket Associations</li> </ul>

PROJECT STAGE	Description	Key stakeholders to be involved
STAGE 3 PROJECT INCEPTION	<ul> <li>Site investigations have been confirmed and potential site risks mitigated</li> <li>The capacity of the site to accommodate the new or extended infrastructure has been confirmed</li> <li>A Feasibility Study and Business Case has been developed</li> <li>Funding sources and partners have been confirmed</li> <li>Funding partner requirements have been factored into the project</li> <li>Project brief and clear scope has been written to confirm all requirements</li> <li>Project budget and timeframes are established (preliminary consideration of future operational and maintenance costs should also be considered)</li> </ul>	<ul> <li>Landowner</li> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Local Communities</li> <li>Architect</li> <li>Technical Consultants</li> <li>Funding Partners</li> <li>State or Territory Cricket Associations</li> </ul>
STAGE 4 CONCEPT DESIGN	<ul> <li>Appointment of architect, quantity surveyor (if required) and technical consultants (including ESD consultant to ensure sustainability considerations are considered and captured early in the design process)</li> <li>Detailed site investigations are confirmed by design teams</li> <li>Approval requirements for planning, building, and funding have been established</li> <li>Multiple design options are undertaken with a preferred option selected</li> <li>Selected option has been confirmed against original project brief and scope</li> </ul>	<ul> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Local Communities</li> <li>Architect</li> <li>Technical Consultants</li> <li>Funding Partners</li> <li>State or Territory Cricket Associations</li> </ul>
STAGE 5 DESIGN & DOCUMENTATION	<ul> <li>Preferred concept design is developed and documented. It is recommended that LGAs seek early design review and input from key maintenance staff to ensure maintenance considerations are reflected in the design.</li> <li>Design has been reviewed and approved by relevant stakeholders</li> <li>Planning and building permit approvals have been obtained</li> <li>Funding partner requirements have been incorporated</li> <li>Costs and timeframes are confirmed</li> </ul>	<ul> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Architect</li> <li>Technical consultants</li> <li>State or Territory Cricket Associations</li> </ul>
STAGE 6 TENDER & CONSTRUCTION	<ul> <li>Project procurement process has been undertaken and a suitable, qualified contractor has been selected</li> <li>Clear timeframes and budgets expectations have been set and appropriate contracts signed</li> <li>All planning and building permits have been obtained</li> <li>Approval from funding partners have been obtained</li> </ul>	<ul> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Architect</li> <li>Technical Consultants</li> <li>State or Territory Cricket Associations</li> <li>Funding Partners</li> </ul>

PROJECT STAGE	Description	Key stakeholders to be involved
STAGE 7 OPERATION & MAINTENANCE	<ul> <li>Project work has been completed and the facility is operational</li> <li>Operational responsibilities are allocated</li> <li>Maintenance regimes and budgets have been established</li> <li>Maintenance and operational outcomes are monitored, logged and reported</li> </ul>	<ul> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Local Communities</li> <li>State or Territory Cricket Associations</li> </ul>
STAGE 8 PROJECT EVALUATION	<ul> <li>Annual review of project outcomes against project objectives is conducted by stakeholders</li> <li>Document the outcomes following project implementation (e.g. has participation increased, have operational costs reduced, what feedback have your received from stakeholders?)</li> <li>Communicate outcomes and benefits to stakeholders regularly</li> <li>Use documented outcomes to inform future needs and your next project</li> </ul>	<ul> <li>Local Government</li> <li>Club / Venue Operators</li> <li>Local Communities</li> <li>State or Territory Cricket Associations</li> </ul>



Ensure that any professional services consultants and/or contractors engaged are suitably qualified and hold appropriate licences and insurance(s).





## SECTION 3

## TECHNICAL INFORMATION AND GUIDANCE NOTES

# GUIDANGE MOTE OT PLAYING FIELD

#### Introduction

Cricket playing fields are fundamental to participating in the game of cricket. It is critical that playing fields are provided to the best quality and standard in order to maximise their use, enjoyment and experience for all users.

The game of cricket is evolving at all levels and changes in the way cricket is played has increased the demand for greater flexibility in and from the field of play. The introduction of junior modified formats and T20 cricket in particular, have driven differing match day needs and considerations at all levels of community cricket. These changes, albeit positive for the growth of the sport, have also influenced the complexity of playing field planning and development.

This Guidance Note provides information and recommendations regarding the following aspects related to cricket playing fields:

- Geometry and dimensions
- Surface types
- Drainage
- Irrigation
- Fencing
- Storage
- Sight screens
- Scoreboards
- Shade amenities

Throughout this Guidance Note, design and planning tips and references to Environmentally Sustainable Design (ESD) considerations and maintenance recommendations are also provided.

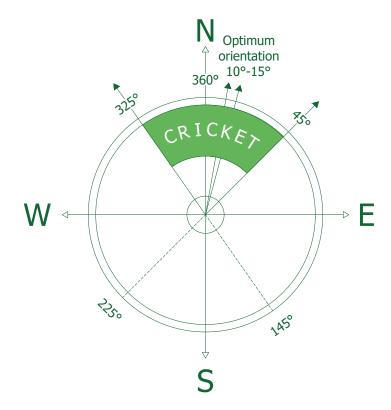
#### Geometry

#### Configuration

The orientation of cricket playing fields is an important planning consideration.

The time of day (early morning or late afternoon) and the time of year (winter or summer) has a bearing on optimum playing field orientation. The aim however is to share between opposing participants the advantages and/or disadvantages of the sun's direction and natural factors such as breezes.

It is recommended that cricket playing fields and pitches are orientated in a northsouth direction to minimise the effect of a setting sun on players, with a range being between 45 degrees east of north and 35 degrees west of north and the suggested optimum orientation of 10-15 degrees east of north.



Playing pitch orientation can be independent to cricket playing field orientation. For example, an oval sized for AFL could be orientated outside the cricket field limits (i.e. east-west) with the cricket pitch still orientated in accordance with guidance as above (i.e north-south orientation).



It is important to recognise that local conditions may override these recommendations and each site and associated conditions should be treated individually.

#### Playing field dimensions

Cricket playing field dimensions can vary dependent upon:

- Location (i.e. due to site constraints)
- Level of competition
- Primary use

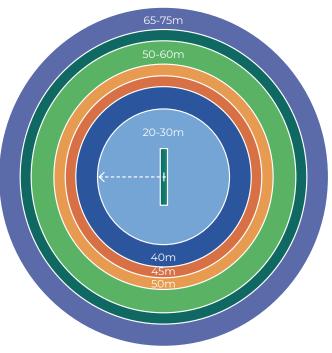
It is recommended that all new or redeveloped playing fields be developed to accommodate the maximum recommended sizes for senior play, creating opportunities to reduce boundaries (via rope or line marking) for all relevant forms and formats of play.

The following diagram and supporting table outlines recommended playing field dimensions for varying levels of community cricket competition and associated age groups.

LEVEL/TYPE OF COMPETITION	PREFERRED PLAYING FIELD DIMENSION
Cricket Blast Game	20m to 30m
Junior Format Stage 1	40m
Junior Format Stage 2	45m
Junior Format Stage 3	50m
Open Age - Community Club	50m to 60m
Open Age - Premier*	65m to 75m

<sup>\*</sup> Note: Consultation with relevant State or Territory Premier Cricket governing body is recommended to confirm individual rules and regulations.

AGE RANGE (INDICATIVE ONLY)			
Junior Format	Boys/Mixed Competition	All Girls Competition	
Stage 1	U/11	U/13	
Stage 2	U/13	U/15	
Stage 3	U/18	U/18	



Existing playing fields currently being used for cricket are not all expected to meet these recommended dimensions. However, all new fields being planned, realigned, developed or upgraded should use the documented dimensions as a way to guide the desired levels of play for each playing field.

If existing playing fields do not meet minimum preferred playing field dimensions, it is advised that relevant Clubs, Associations, Councils and landowners work together to seek a solution to ensure that play can be facilitated while maintaining the safety of players, spectators and other site users. Protection of property including residences and vehicles should also be a consideration in decision making.



#### **BOUNDARY SIZES AND RUN-OFFS**

Plan for the maximum boundary size and rope off or line mark boundaries within the playing area to achieve the greatest range of cricket participation options.

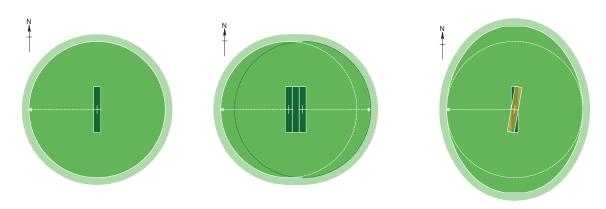
Playing field planning should also factor in run-off areas from boundary markers to the nearest fixed obstruction or neighbouring playing field. This run-off area should be considered in addition to the identified field of play dimensions in the table and diagram on the previous page.

The following diagrams represent how to measure playing field dimensions for both single pitches and turf pitches/tables. When planning and measuring playing field dimensions, distances should be taken from the middle point of the centre pitch\* (for single pitch grounds) or from the centre of both the east and west pitches where a turf table or multiple pitches are present.

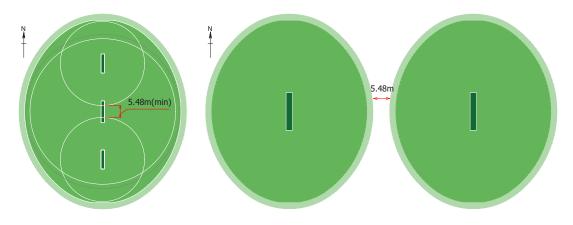


#### \*JUNIOR FORMAT STAGE 1

Due to the fact the batter only bats from one end, the boundary distance (40m) should be measured from the batter's end stumps.



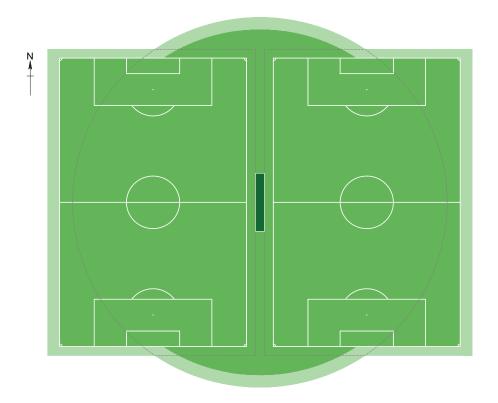
Where multiple playing fields are provided within the one playing area (particularly when configured for junior formats), a minimum 5.48m run-off distance (2 x 2.74m) between each playing field's boundary line/markers is recommended to reduce potential conflicts between grounds and games being conducted concurrently. Participants should remain vigilant for potential conflicts between matches (e.g. balls entering neighbouring field of play).



Winged playing areas allow for the configuration of multiple fields of play for a range of sports including:

- Cricket
- Australian Rules Football
- Rugby League
- Rugby Union
- Soccer

Below is an example of a winged playing field environment which efficiently combines a cricket playing field with two rectangular pitches.





#### **MULTIPLE FIELDS OF PLAY**

When designing multiple fields of play for a range of sports that are to be overlayed on the same playing area, consider the level of lighting required for each sport and the location of floodlighting poles. Poles should be positioned outside the field of play and designated run-off areas for all proposed sports and uses. For further information on lighting, refer to Guidance Note 06.

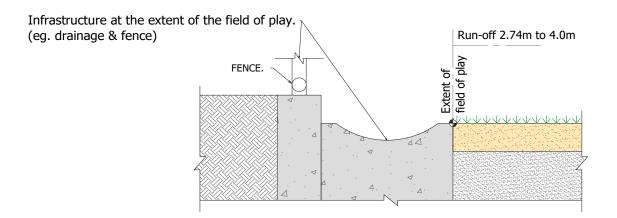
#### Run-off area

It is recommended the run-off area (beyond the boundary line/rope) should be:

- Obstacle free (including perimeter drainage infrastructure, fencing, lighting poles, sight screens, football goal posts and cricket practice facilities/nets).
- Same gradient as the outfield.
- Same surface as the outfield or an approved equivalent (i.e. synthetic grass). If a Cricket Australia-Australian Football League compliant synthetic grass is used, it is recommended there be a minimum of 1m natural turf between the boundary line and the start of the synthetic grass.

Run-offs take precedence over playing field dimensions and all playing fields shall adhere to the minimum requirements as tabled below.

LEVEL OF COMPETITION	RUN-OFF DIMENSIONS	
LEVEL OF COMPETITION	Minimum	Desirable
All age groups and levels of community cricket	2.74m	4m





#### Playing field surface shape and gradients

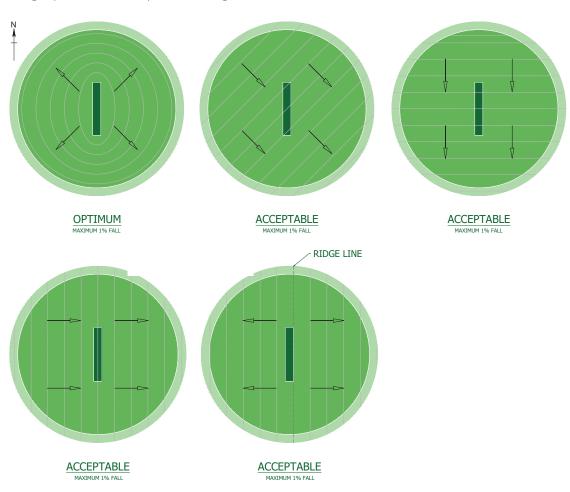
Cricket playing fields should include an appropriate surface fall, which aids with effective drainage but does not negatively impact on its playability.

Like the playing field dimensions, the shape and gradient of the playing area may be dictated by site constraints (i.e. existing terrain, buildings locations) and the level of competition. Additionally, the type of playing surface profile and supporting drainage infrastructure will also impact on the surface shape and gradient.

#### The recommended maximum gradient for an oval is 1% fall in any convenient direction.

Any steeper gradient than 1% will impact the performance of ball roll. Flatter surface grades are more likely to impact on the performance of playing field drainage (i.e. be very/too reliant on the profile and subsurface drainage infrastructure to effectively remove surface water), which may also ultimately impact on performance and playability.

The preferred fall direction of a playing field is a dome shape fall from the centre wicket pitch area. The dome shape provides protection to the pitch area from stormwater runoff in large rain events and should be a strong consideration at all new or reconstructed playing fields. When a dome surface cannot be accommodated and a turf pitch is required, the designer should try to ensure surface water run-off is directed away from the turf pitch. As alternatives, cross-fall and diagonal falls (identified in the following images) are also acceptable design methods.





Always seek professional advice when planning a new playing field development or undertaking a surface upgrade/reconstruction project.

#### **Buffer zones**

Cricket is a 360-degree sport with the hitting zone for batters heavily dependent on the level and format of competition.

When designing and developing playing fields and park precincts, buffer distances between cricket boundaries should be considered in relation to other park infrastructure including car parks, roadways, neighbouring properties, trails and playgrounds.

Appropriate buffer distances from boundaries are to be determined as part of a venue safety assessment to reduce risk and increase park user and property safety. Additional design elements including mounding, vegetation planting and fencing and their appropriateness to local conditions, settings and aesthetics should all be considered during venue design stages to assist in reducing and alleviating potential risk.



Due to the 360-degree nature of cricket and a rise in shorter formats (e.g. T20 cricket where there is likely to be a greater frequency of power hitting), buffer zones are recommended right around the playing field perimeter.



The Marsh/Cricket Australia Matchday Checklist is available for Apple and Android devices and should be completed by clubs prior to every match to ensure reasonably foreseeable hazards have been identified and mitigated before the start of play. Completion of the checklist will assist clubs in discharging their duty to provide a safe environment for players, spectators and match officials.



Refer to Guidance Note 07: Pavilions and Change Facilities for additional considerations regarding site planning and the optimum location and layout of site infrastructure.

#### Natural turf playing fields

From a playability and water conservation perspective, the preferred turf cultivar for cricket playing fields in Australia are generally warm season grasses (e.g. couch grass, kikuyu). Determining the most appropriate turf species and playing surface profile for local conditions and climate should involve consultation with a turf agronomist and be considerate of:

- Playing surface profile (see following images)
- Availability and quality of water supply for irrigation
- Level of usage year-round
- Ground maintenance service provision levels



For areas prone to flood inundation, couch grass and kikuyu turf species are preferred as they show more resilience during prolonged flood inundation and have a faster recovery time.

#### **Profile**

The selection of the appropriate profile for playing fields should be undertaken by a qualified agronomist, and the following elements considered:

- Project budget for initial construction
- Budget for on-going maintenance
- Availability of materials and skill of local resources to undertake the maintenance of the playing field
- Climatic conditions
- Availability of supporting infrastructure (i.e. drainage and irrigation) to support turf growth
- Compatibility of profile with existing underlying subgrade material
- Year-round use and volume of usage of the playing field (including not cricket use)

The following tables summarise some of the options and key elements related to playing surface profile.



If situated in an area subject to drought, seek advice from a qualified agronomist regarding potential drought-tolerant grass species. Where possible, investigate the suitability and use of native grass species (pending site location and local conditions).

#### TABLE 1 - LOW COST PROFILE OPTIONS

CONSIDERATIONS	SANDY LOAM	SAND CARPET
PROFILE	TURF PLAYING SURFACE. SANDY LOAM.	SAND SLIT.  SUBSOIL DRAIN.
OVERVIEW	■ Blended mix of sand with silt/soil	■ Thin sand layer (less than 100mm)
+ ADVANTAGES	<ul><li>High moisture retention</li><li>Easy to establish turf initially</li></ul>	<ul> <li>Improved performance than sandy loam</li> <li>Similar performance as rootzone sand during warmer months</li> </ul>
- DISADVANTAGES	<ul> <li>Poor drainage (low infiltration)</li> <li>Susceptible to compaction</li> <li>Subsoil drainage relatively ineffective unless sand slit drains used</li> <li>Reduced hours of use during wet seasons compared to the other options</li> <li>Likely increased level of maintenance required</li> </ul>	<ul> <li>Reduced drainage capacity</li> <li>Specialist construction equipment required</li> <li>Not suitable in most problematic subgrades</li> </ul>



It should be noted that a sandy loam profile requires an increased maintenance effort when compared to other profile types. This is due to the elevated amount of silt and clay within the profile. This profile type calls for additional aeration practices (e.g. verti-draining) to relieve profile compaction and increase soil aeration.

#### TABLE 2 - HIGHER COST PROFILE OPTIONS

CONSIDERATIONS	ROOTZONE SAND	PERCHED WATER TABLE
PROFILE	TURF PLAYING SURFACE.  ROOTZONE SAND. SUBSOIL DRAIN.	TURF PLAYING SURFACE.  ROOTZONE SAND.  PERCHED WATER TABLE.  DRAINAGE GRAVEL.  SUBSOIL DRAIN.
OVERVIEW	<ul> <li>Constructed from natural sand deposits of processed sand – typical depth 250–300mm</li> </ul>	<ul> <li>Rootzone sand overlying drainage gravel to create a perched water table at the interface of the sand and gravel - typical depth 350 - 400mm</li> </ul>
+ ADVANTAGES	<ul> <li>High infiltration rates</li> <li>Not susceptible to compaction</li> <li>Increased performance during wet season compared with Sandy Loam profile</li> </ul>	<ul> <li>High infiltration rates</li> <li>Not susceptible to compaction</li> <li>Perched water table encourages deep root growth</li> <li>Ability to monitor and reduce irrigation usage</li> <li>Increased performance during wet season compared with sandy loam profile</li> </ul>
- DISADVANTAGES	<ul> <li>May require amendments to improve moisture retention.</li> <li>More difficult to maintain during periods of sustained extreme heat.</li> <li>Stability can be an issue with some natural sands.</li> </ul>	<ul> <li>May require amendments to improve moisture retention</li> <li>Stability can be an issue with some natural sands</li> <li>Expensive compared to other options.</li> </ul>

#### Maintenance

All natural turf playing fields will require ongoing annual turf maintenance in order to maintain the quality and integrity of the surface across the entire year. Across all profile types, the basic maintenance requirements are the same and should include, but are not limited to the following:

- Regular mowing
- Vertical cutting
- Pest, weed, insect and disease control
- Soil aeration
- Irrigation
- Fertilising

The natural turf playing field should have an appropriate level of overall turf coverage and be cut to a short and even length with no bare patches. If dangerous holes and undulations exist, these should be addressed so that the playing surface is level. Care should be taken to ensure there are no excess grass clippings on the field of play.



If heavy vehicles require access to the playing field for maintenance purposes, consider wet weather and ground conditions to avoid rutting or damaging the playing field and/or surrounds.

#### **Environmental Sustainable Design (ESD) considerations**

ESD considerations when designing and maintaining a natural turf surface include:

- A natural turf surface can provide a high surface infiltration rate which can reduce surface water runoff during rainfall events. Water that enters through the turf surface and into the sand profile is naturally treated through natural filtration processes within the soil. This means that the water has a degree of filtration prior to discharging into the drainage network. Note: the water from the field still requires management to prevent chemical leaching from fertilisers and entering waterways.
- Large amounts of water are required for irrigating a natural turf surface to ensure healthy turf growth, particularly where natural rainfall is not sufficient. In these areas or instances, water quantities can be offset through:
  - ▶ Use of rainwater harvesting and reuse and/or use of recycled water
  - ▶ Turf species that require less annual water demands (e.g. warm season turf species, couch grasses)
  - Monitoring profile moisture levels
- Sourcing locally supplied turf and profile materials (i.e. growing medium) can reduce CO<sup>2</sup> emissions from transportation

## Synthetic grass playing fields





Whilst natural turf remains the preferred playing field surface type for cricket (across all levels of play), Cricket Australia acknowledges the role full synthetic field surfaces can play in providing both increased and more flexible programming opportunities for cricket programs, training and competition.

Synthetic turf technology has evolved significantly over the past 10 years and is now commonly used by many major sports throughout the world. As a result of these developments, the AFL and Cricket Australia has developed a synthetic turf licencing program to enable the playing of community level Australian Football and Cricket on an approved synthetic product. Note: This licencing program relates to the synthetic product used across the field of play/the outfield. It does not include synthetic products used on centre synthetic cricket pitches.

The program is underpinned by a six-step testing process to ensure that products being manufactured meet specific performance and quality (i.e. longevity) criteria and that the products comply with safety and insurance requirements.

The AFL/Cricket Australia 'Approved Synthetic Turf Product' mark is awarded to those products that have been subject to a series of stringent laboratory tests. These tests currently include those for durability, joint strength, resistance to weathering, ball roll and bounce, hardness, critical fall height, traction and abrasion.

Every oval installed must meet a second stage of testing that occurs on site once the oval has been laid and filled to produce the playing surface and has been allowed to settle and be played on for a period of one month or 160 hours of play. Once an oval has met all the requirements of the field testing it will be issued with official certification that the oval complies with AFL/Cricket Australia Standards. Retesting is required every two years to ensure ongoing accreditation.

For further information on the licensing program please visit:



#### ESD considerations and impacts of synthetic playing fields

A number of environmental factors should be considered when investigating installation of a full synthetic grass surface playing field. Local site conditions and surrounds should also be factored into decision making.

#### Potential environmental risks:

- Synthetic grass systems, with rubber performance infill, absorb and radiate heat thereby heating the surrounding environment (Note: Use of organic infill may assist with reducing heat).
- Microplastic displacement from the intentionally added rubber performance can contaminate the adjacent environment. (Note: Use of organic infill and non-infill products will help minimise this issue).
- During periods of rainfall, black crumb used for the base of synthetic fields and microplastics from the synthetic grass may make its way as run-off into stormwater drains. For further guidance on how to minimise infill dispersion, refer to SA TR CEN 17519:2021.
- Conversion from a natural surface to a synthetic surface will increase surface run-off to downstream drainage infrastructure. (Note: Use of a free draining gravel base may help to alleviate this issue through detention in the profile itself).
- Increased CO<sup>2</sup> omissions during the production, transportation and end of life disposal phases.
- Synthetic grass does not decompose, meaning unless it is repurposed, it will end up in landfill (Note: Research continues into future synthetic grass recycling opportunities, with planning underway for Australia's first purpose built synthetic grass recycling hub).

#### Environmental benefits:

- Reduced maintenance activities compared to natural turf, therefore reducing CO<sup>2</sup> emissions while operational.
- Stormwater retention beneath the synthetic grass profile is an option to capture and re-use stormwater run-off for irrigation of adjacent areas.
- Pending condition, synthetic grass may be repurposed, in-turn delaying disposal to landfill.



Cricket Australia strongly recommends that the above ESD and construction considerations be discussed with suppliers and/or installers prior to the installation of any new or upgraded synthetic playing fields.

## **Hybrid Turf**

There are a variety of hybrid turf products currently available utilising a range of methods to combine natural turf grass with synthetic plastic fibres. The use of hybrid turf is becoming more common in both areas of high wear (e.g. bowler run ups and pitch surrounds) as well as an alternate cricket pitch surface type. The performance and suitability of hybrid turf products is heavily dependent on the geographic location, related clay type/profile and level of maintenance undertaken at each site.



If considering installation of hybrid turf, seek advice from product supplier/ installer on:

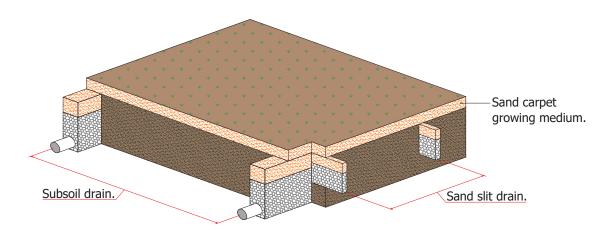
- the suitability of the product for local conditions and proposed use/ utilisation
- maintenance requirements to support optimal performance and longevity
- product warranty requirements

Cricket Australia is committed to further research and development into hybrid turf products and related installation methods to better understand this surface type's suitability and compatibility with Australian conditions.

## **Drainage infrastructure**

The role of the drainage system for playing fields, regardless of whether it is natural turf or synthetic grass, is to effectively remove the water from the surface and discharge it into the nominated point of discharge. A drainage system might consist of the following elements:

- Subsurface pipework: Slotted drains to relieve moisture build-up in the profile and discharge into collector pipes.
- Sand slits/grooves: Closely spaced narrow trenches filled with free draining material (i.e. sand) to discharge into slotted subsurface pipework (see image below).



Sand carpet drainage system typical detail

- Pits: Grated drainage pits collect surface water when located in low points, spoon
  drains and discharge into collector pipes. Junction pits (i.e. solid lids) aid in the
  directional and level change of collector pipes and can combine multiple entry
  pipes to a single outfall pipe.
- Collector pipes: Solid pipes to convey the water collected by subsurface pipes and grated entry pits to nominated point of discharge.



Many playing fields won't have any formal drainage pipework and will solely be reliant on the grades of the oval to drain run-off to the perimeter.

For areas prone to flood inundation, the inclusion of adequately designed drainage infrastructure in combination with appropriate profile will enable a flood affected playing field to readily drain and enable required maintenance activities to be undertaken. This will allow the ground to be promptly returned back to suitable level of use.

#### Drainage performance requirements

The subsurface drainage system should be designed to cater for the infiltration rate of the turf profile.

#### Maintenance

Constant maintenance is required to ensure drainage systems continue to function. Inspection of drainage systems should be undertaken annually. Cracking might occur in pipes and pits, which will need repair to avoid water entering into subgrade level.

Turf maintenance practices also play a part in the effectiveness of drainage systems (e.g. activities including aeration, vertical cutting, reduction in thatch, top dressing materials).

#### ESD considerations

ESD considerations when designing and maintaining drainage infrastructure include:

- When considering the drainage network, be efficient and avoid redundant drainage infrastructure.
- Consider using drainage pipes made from recycled materials.
- Most plastic pipe systems are sustainable and environmentally friendly. Plastic pipes provide leak protection and resistance to corrosion. Due to its lightweight characteristics, a lower carbon footprint is produced during transportation.

## Irrigation network

Irrigation systems should be designed to evenly and effectively apply water to a natural turf or hybrid turf field of play. Irrigation is typically not required for synthetic grass surfaces.

The irrigation system consists of a primary water source, supplying an underground mainline pipe network that is connected to electric solenoid valve assemblies. Lateral pipes connect sprinklers to the solenoid valves, and the entire system is automatically controlled via low-voltage wiring and a fit-for-purpose irrigation control unit.

#### Irrigation performance requirements

The irrigation system should be designed to meet the requirements of the field of play. taking into account the site water supply and the local climatic conditions.

Generally, the minimum requirements of an irrigation system should meet industry best practice guidelines, which have been summarised below:

- Sprinkler CU% (Coefficient of Uniformity)≥90%
- Sprinkler DU% (Distribution Uniformity) ≥ 85%
- SC (5%) (Scheduling Co-efficient) ≤ 1.3



Image courtesy of SportEng



An important factor when designing an irrigation system is its ability to apply a reasonable amount of water in a reasonable amount of time. Generally, an irrigation system will be designed to meet 10mm application of water across the entire field of play over an eight hour period.



Consider the time of day when programming irrigation systems to ensure conducive climatic conditions, minimise excess water usage and to save on operating costs.

#### Maintenance

Seasonal maintenance is required to ensure the irrigation system operates as intended to provide an even and effective application of water to the field of play.

At the beginning and end of the irrigation season, each sprinkler line should be operated and inspected for any obvious faults (i.e. broken sprinklers, leaks, under performance, solenoid valve not operating). Any faults should be recorded and rectified and should form part of an annual maintenance program.

#### **ESD** considerations

An irrigation system, particularly for natural turf, requires a high amount of water to ensure healthy turf growth when natural rainfall is insufficient. Alternative sources of water other than drinkable potable water (i.e. recycled water, harvested rain and/or stormwater), should be considered to off-set the dependence on drinkable potable water.

Depending on geographic location, some turf species are more resilient and drought tolerant than others, resulting in reduced irrigation loads. Warm season turf species such as couch grasses are particularly drought tolerant.

## Perimeter fencing

#### **Ground fencing**

Australian cricket recognises the importance of developing multi-use sporting facilities and the potential limitations perimeter fencing can have on the overall flexibility and use of open space. With this in mind, and where fencing does not impede on a site's overall usage, community access, flexibility and capacity to expand, it is cricket's preference that a fence be installed around the oval boundary to limit balls leaving the field of play.

The traditional 'white picket' fence is an aesthetically appealing sports ground fencing option that is more appropriate for a Premier level venue. Before opting for this style of fencing, consider other users of the playing field, maintenance requirements and potential safety and injury hazards. The traditional picket fence is now manufactured in a range of materials, including metal and durable plastics to prolong lifespan and reduce cost. For a Club (home) or Club (satellite) venue, a cyclone mesh wire fence at either 1050mm or 1200mm around the playing field is desirable.

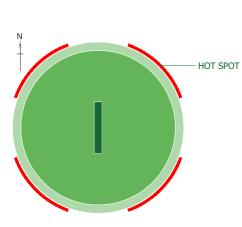


It is important that perimeter fencing allows for an emergency vehicle entry/egress (typically double gate 4m wide opening) and enables curator machinery unimpeded access to the playing field. This access should be in close proximity to the curator's equipment and machinery storage facility or internal road network should machinery not be kept on site.

#### Safety fencing

Fencing that protects spectators and pedestrians or limits damage to neighbouring properties, infrastructure and vehicles is highly recommended, particularly in 'hot spot' areas prone to cricket balls being hit during play.

Cricket is a 360-degree sport with the hitting zone for batters heavily dependent on the level and format of competition. The diagram below highlights the main 'hot spot areas' for overhitting for both left and right handed batters. Safety fencing may be prioritised in these areas as one solution to assist in minimising the risk of injury or damage. **Safety fencing will not eliminate** potential injury or damage and each site should have its own safety audit completed by the facility owner.







If installation of safety fencing is not feasible, it is recommended from a risk management and liability perspective that warning signage be placed around the ground advising the public of the sporting activity taking place and to be aware when travelling past or parking their vehicle.

## **Fence options**

There are a number of different options for the construction of a perimeter fence. Selection of the fence material will be dependent upon fence height, durability and aesthetics.

FENCE TYPE	PVC PICKET FENCE	CHAIN MESH FENCE	VINYL FENCE
Material	Aluminium with PVC coating	Aluminium with PVC coating	Timber
Colour	White	Black	White



#### Access and egress points

Where a fence is included around the perimeter of the playing field, single gates for pedestrians and double gates for easy maintenance and emergency vehicle access will be required.

Pedestrian gates should be appropriately located to enable efficient access to and from the playing field for both players and other users of the facility. Pedestrian gates should be a minimum 1.35m in width to allow for universal access.

Double gates for maintenance and emergency vehicles should be in accordance with relevant Australian Standard AS 1725.1–2010 Security fences and gates – General requirements and should be not less than 4m in width and should consist of double gates.



Double gate access to the playing field to enable emergency vehicle and/or curator machinery easy entry/egress.

#### Maintenance

To ensure perimeter fencing is fit-for-purpose and long lasting, ongoing maintenance works are required. Inspection along the fence line should be undertaken for signs of damage. Replacement or repairing of the fence should be considered when damage is identified. The following items should be considered during inspection:

- Wear and tear
- Broken links and holes
- Sagging or leaning fences
- Sinking or heaving fence post foundations

#### **ESD** considerations

ESD considerations when designing and maintaining fencing include:

- Recycling material of fencing and fencing coating can be considered.
- Material such as steel or vinyl requires low maintenance and provides a long service life.

## Sight screens

Sight screens are large structures (generally on wheels or permanently fixed to rails /fencing) placed outside the boundary line/rope at both ends of a playing field behind the bowler's arm. Sight screens are used to assist a batter's vision of the ball leaving the bowler's hand as they provide a solid contrasting background.

Whilst not a requirement at all levels of community cricket\*, sight screens are required for Premier level cricket venues and recommended for grounds that have distracting backdrops (e.g. passing traffic) or structures or vegetation that impact on batter visibility.

#### **Dimensions**

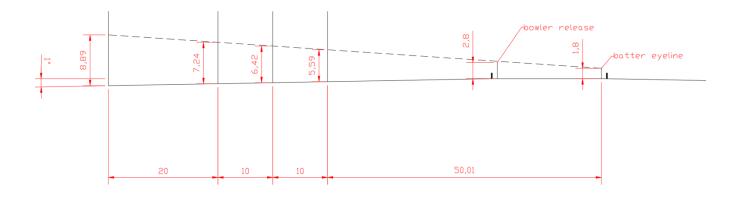
Dimensions for sight screens will vary depending on the following:

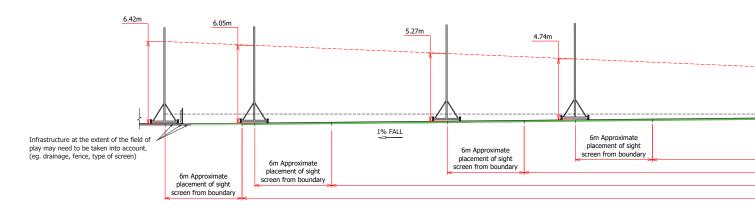
- Distance from the pitch
- Grade/fall in playing field surface level (from pitch to sight screen location)
- Playing field backdrop/surrounding infrastructure (e.g. vegetation, passing traffic)

#### As a minimum:

- A sight screen's height should extend to cover the release point of all bowlers
- A sight screen's width must provide sighting for a right-handed batter facing a leftarm bowler who is bowling around the wicket and a left-handed batter who is facing a right-handed bowler who is bowling around the wicket.

As a guide, a movable sight screen that measures 6m x 6m will generally accommodate most options.





<sup>\*</sup>Refer to local Cricket Associations for sight screen requirements.

#### Location

- The location of sight screens should consider the following:
- Sight screens should be located behind the bowler's arm and a minimum 2.74m / recommended 4m from the boundary line (Refer to Site Planning diagram located in Guidance Note 07 for recommended sight screen location).
- Sight screens can be fixed or movable.
- Movable sights screens should be easily movable from side-to-side so that width extremes can be covered. This movement should be able to be completed in under 30 seconds at any given time.
- Fixed sight screens must cover the extremes of bowler's delivery points.



All movable sight screen designs and/and or installation methods should include a 'locking' feature or be engineered in a manner to withstand high winds.

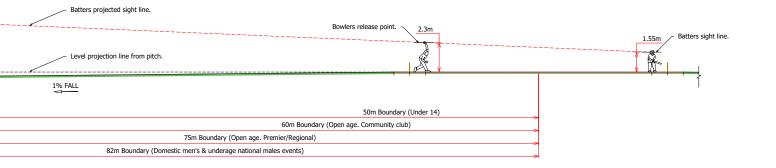
#### Colour

Interchangeable or reversable white (for red ball) and black (for white ball) coloured sight screens are recommended to accommodate varying cricket formats and competitions.

#### Fixed sight screens

Fixed or non-movable sight screens should consider the following:

- Be designed by an appropriately qualified structural engineer and constructed by an appropriately qualified licenced contractor.
- Undertake a site investigation (local services dial before you dig or similar).
- Investigate site conditions, including a geotechnical investigation or soil test to inform foundation footing dimensions.
- Structural engineering for wind loads for screening (for the material type and fixings) and structure.
- The need for a local planning permit or building permit from the local planning authority.



#### Mobile sight screens

Movable sight screens should consider the following:

- Be designed by an appropriately qualified structural engineer and constructed by an appropriately qualified licenced contractor.
- Structural engineering for wind loads for screening (for the material type and fixings) and structure.
- Should have suitable outriggers or alternative design functions to prevent the screen from moving or falling over in wind.

#### Geometry

In community level cricket, the screens are often at ground level, but should be tall enough so that the bowler's arm does not extend above them from the batter's line of view.

#### Maintenance

Maintenance for sight screens should include (but not be limited to) the following:

- Visually inspect sight screens before and after each use to identify any obvious issues or damage.
- Regularly check bolted connections on the screens and track.
- Reapply paint coating in worn areas and over rust marks if necessary.
- Remove slats from screens to prevent wind damage in extreme weather.
- When not in use, seek to store/secure sight screens in a weather protected area to minimise wear and tear/deterioration.

#### ESD considerations

ESD considerations when designing and maintaining sight screens include:

- Consider choosing a sight screen material that's rust or corrasion resistant.
- Perform ongoing maintenance for longevity.

## **Scoreboards**

Electronic or manually managed scoreboards should be provided at all levels of community cricket. The model and detailed design of the scoreboard (electronic or manual, fixed, temporary or portable) will differ for each venue, and will depend on scoreboard requirements, features, site conditions and available budget.

Items to consider when planning the type and model of scoreboards include:

- Ensure the proposed location provides optimal visibility for spectators and players. If electronic, consider the impacts of afternoon sun glare on its readability.
- Once the preferred location has been confirmed, it's recommended a soil test and an assessment of nearby tree roots be undertaken to determine site suitability.

- If opting for an electronic scoreboard, determine what functions it will need to perform. If sharing the scoreboard with a co-tenant, consider their requirements also.
- If opting for an electronic scoreboard, assess the location and appropriateness of the site's power supply to accommodate and effectively operate the additional infrastructure (e.g. internet connection and data cable).
- The need for a local planning permit or building permit from the local planning authority for a permanent scoreboard structure.



Depending on the distance from players and spectator areas, it is important to ensure the scoreboard characters (e.g. numbers and letters) are of appropriate size. Consult with a qualified scoreboard manufacturer when deciding on character size requirements.



Consider the scoreboard's location (protection) in the context of 'hot spot' hitting zone areas.

Recommended display functions required for scoreboards include:

FUNCTION	OPTION A (BASIC)	OPTION B (STANDARD)	OPTION C (ADVANCED)
WICKETS	•	•	-
RUNS (TOTAL)		•	-
OVERS BOWLED	•	•	-
OVERS REMAINING			
TARGET		•	-
CLOCK			
BOWLER NAME & STATISTICS		•	-
BATTER (X2) NAME & STATISTICS			
BATTING LINE UP			-
LAST WICKET			
FIRST & SECOND INNINGS SCORES			-
RUN RATE			
REQUIRED RUN RATE			•
DUCKWORTH LEWIS PAR SCORE			
FIELDING RESTRICTIONS OVER INDICATOR			-
SUPER OVER COMPATIBLE			-
SPONSOR ADVERTISING			-
VIDEO PLAY BACK			

**Scoreboard Options A and B** are typically suited to Community Club Home and Satellite venues. Typically at community club level, batter and bowler names and statistics are not required. However, versions of electronic scoreboards provide this level of detail for community level venues. **Option C** is most suited towards Premier Cricket and higher levels of competition.



Existing electronic scoreboards may require an upgrade to enable PlayHQ eScoring. It is recommended the relevant scoreboard manufacturer be contacted to advise of any required enhancements and associated costs.

#### Benefits of electronic scoreboards

Electronic scoreboards are encouraged due to the ability to integrate with PlayHQ and facilitate live scoring opportunities. Electronic scoreboards can also enable the opportunity to promote sponsors, link to social media, display community messages and create an overall improved match day experience for players, umpires and spectators. More advanced scoreboards also have the capacity to play movies and video content and can be used for additional community events outside of cricket.

- Additional considerations for scoreboard selection include:
- Consultation with a scoreboard manufacturer to ensure compatibility between the product and the PlayHQ registration and competition management system.
- Once the electronic scoreboard's required functions have been finalised, confirm with an electrician or electrical engineer power supply requirements to determine whether existing supply is adequate (or if an upgrade will be required).
- Irrespective of whether the scoreboard is electronic or manual, ensure the design (framework and footings) is prepared by a suitably qualified engineer and installed by a qualified contractor. The footing design will be subject to the size and weight of the scoreboard.

#### Maintenance

Maintenance of scoreboards should include (but not limited to) the following:

- Undertake maintenance as specified by the manufacturer during the off-season (or between seasons if sharing with a winter tenant).
- Visually inspect scoreboard and framework to check for any physical damage or deterioration.
- Engage with an electrical technician to conduct testing on the performance of the system. If faulty, contact the scoreboard manufacturer directly who will advise of any repair or replacement process.
- Always perform a scoreboard test before the first game of the season to ensure the scoreboard is fully functional.

#### ESD considerations

ESD considerations when designing and maintaining scoreboards include:

- Unplug power during the off season to reduce usage (if not shared with another user).
- LED scoreboards require less energy and can maintain a long-lasting service life.
- Solar power scoreboards present an alternate option; however, the requirement of design is determined by location and the capability of capturing sunlight.

## **Storage**

#### Maintenance equipment

A well-positioned and adequately sized maintenance and equipment storage area for turf pitch curator machinery and equipment is a key facility requirement for venues with turf pitches.

When deciding on the best location for a curator storage shed, ensure it is in close proximity to the playing field and that easy access to the playing field is available (e.g. double gates that enable vehicle access onto the ground). Curator storage sheds are recommended within close proximity to the playing field. Access between the storage facility and the playing field should be unimpeded by drainage infrastructure or other impediments to allow for rollers and maintenance vehicles to be used.

To minimise building footprints and use of public open space, consider using the shed as a base for a scoreboard (be mindful of impacts of sun glare on scoreboard).

A consolidated multiple roller door design with separate storage areas for individual pieces of curator machinery and equipment or club equipment is recommended for grounds servicing turf pitches. Ensure the roller door(s) are wide enough for machinery to easily enter and exit. When developing new sheds, consider the future equipment and machinery you may need and design access to cater for it.



The size of a maintenance shed is heavily dependent on the amount of storage required for playing field operational and maintenance equipment. When determining the appropriate size of your maintenance shed, consider listing out all equipment and machinery to be housed within it (e.g. ride on/hand rollers, pitch covers, tools, equipment, secured chemicals).



Safe Work Australia have developed a Model Code of Practice: Managing risks of hazardous chemicals in the workplace. This code of practice provides practical guidance on how to manage health and safety risks associated with hazardous chemicals for persons conducting a business or undertaking who use chemicals in their workplace



#### Other equipment storage

Storage rooms should be designed with shelves to maximise storage room capacity. Provision of separate secure areas or cages for storing seasonal user equipment is ideal to ensure all users can secure equipment on site.

Other considerations in planning for equipment storage include:

- Equipment storerooms should be accessed via an external vertical roller door or double swing door to allow for direct playing field access. The storeroom should ideally be rectangular or square in shape, to allow for maximum perimeter storage.
- Provide perimeter storage shelving (fixed or adjustable) or open compartments for sports equipment or club goods. The height/vertical spacing of the shelves should be designed to accommodate the nature of the storage. Shelving should be constructed from robust materials and be provided with heavy duty supports, either to the wall or on a free-standing frame.
- Where curator's sheds are provided ensure that access to the playing field is on grade or ramped to suit the site levels for the pitch roller and other maintenance vehicles.
- Provide lockable gates (screen mesh or similar) or solid doors to storage shelving and cupboards to prevent theft and vandalism.



If located in a flood prone area it is recommended stock/contents be stored in an elevated location.

#### Maintenance

Maintenance of storage areas should include (but not be limited to) the following:

- Visual inspections of the exterior of storage area to identify wear and tear, rusting and cracks including roof, windows and doors.
- Check the interior of the storage area to identify moisture, water spots or other leaks.
- Check for pests to keep the storage shed safe from termites and dangerous pests.

#### **ESD** considerations

ESD considerations when designing and maintaining storage areas include:

- Location of the storage area should be considered to minimise the impact on native vegetation around the structure.
- Recycled material can be used to reduce carbon footprint (i.e. stainless steel, recycled timber).
- Adequate ventilation is important to ensure airflow in the shed or structure.
- Perform ongoing maintenance to deliver longevity of the structure.

## Shade/Shelter

#### Shade provision

The provision of shelter for players and for spectator viewing areas at community cricket venues is a key design feature that is often overlooked when planning a new cricket facility.

Whether it be permanent shelters with seating, extending a pavilion roofline, shade sails, tree plantings (natural shade is preferred) or a designated area for a temporary shade structure, sheltered spectator areas provide a refuge from the sun during the hot summer months.

With a cricket match or a day's play taking anywhere up to eight hours to complete, shelter from the sun and/or wind will increase the likelihood of spectators staying to watch the match and assisting to protect them from climatic conditions. This not only builds the atmosphere of the match but provides a meeting place for families, friends and local residents, promoting social cohesion, community health and wellbeing and a strong sporting club culture.



Natural shade (tree planting) is highly recommended, as is the use of suitable native species.

#### Maintenance

Maintenance of shade structures should include (but not be limited to) the following:

- Visual inspection of the exterior of player shelter(s) to identify wear and tear, rusting.
- Inspect seating to ensure there is no damage that might cause safety issues.

#### **ESD** considerations

ESD considerations when designing and maintaining shade/shelters include:

- Plastic shelters can be recycled after the long-life cycle. Using recycled plastic can be one of the options to reduce environmental impact.
- Metal shelters that are made of galvanised steel with rust resistant paint can prevent the structure from corrosion and rusting and require lower levels of regular maintenance.
- Multi-use shelters can be considered to reduce the number of shelters required.

# GUIDANGE MOTE OZ PLAYING PITCHES

#### Introduction

Cricket pitches are the fundamental element to facilitating the game of cricket. The standards for the size and related dimensions for full size cricket pitches are guided by the Laws of Cricket as determined by The Marylebone Cricket Club (MCC) in England.

Other evolutions or modified formats of the game accommodate changes in dimensions for cricket pitches. These are predominately focused around the adopted national junior cricket formats, aimed at making cricket more accessible to all players of any age and ensuring that participation opportunities and player development aspects are both considered.

This Guidance Note provides information and recommendations regarding the following aspects related to cricket pitches:

- Pitch provision
- Surface grading
- Line marking
- Natural turf pitches
- Synthetic turf pitches

Throughout this Guidance Note, design and planning tips and references to ESD considerations and maintenance recommendations are also provided.

## Pitch provision

The following table identifies the preferred pitch type for the relevant level of competition.

LEVEL OF COMPETITION	PITCH TYPE
CRICKET BLAST GAME	Flexible [1]
JUNIOR CRICKET – STAGE 1	Synthetic [2]
JUNIOR CRICKET – STAGE 2	Synthetic
JUNIOR CRICKET – STAGE 3	Synthetic or Turf
OPEN AGE – COMMUNITY CLUB	Synthetic or Turf
PREMIER	Turf

[1] Cricket Blast games are typically played on the outfield of a cricket ground (mowing a dedicated pitch area in the outfield will provide a better experience for players). Permanent or roll out synthetic pitches are also a suitable option if available for use.

[2] While synthetic pitches are preferable for Stage 1 Junior Cricket, using one of the outer turf pitches of a centre wicket table, or in some cases a mown area of the outfield are also acceptable alternatives.

AGE RANGE (INDICATIVE ONLY)				
Junior Format	Boys/Mixed Competition	All Girls Competition		
Stage 1	บ/เา	U/13		
Stage 2	บ/เ3	U/15		
Stage 3	U/18	U/18		

#### **Number of Pitches**

The following table provides a guide for the recommended number of pitches and centre wicket areas for the relevant level of competition. Refer to Guidance Note 3: Outdoor Training Facilities for the number of pitches recommended for practice enclosures.

LEVEL OF COMPETITION	PITCH TYPE/NUMBER	COMMENTS
CRICKET BLAST GAME	Synthetic or mown area of outfield: 1	A single oval may have multiple games playing at the same time
JUNIOR CRICKET - STAGE 1	Synthetic: 1[1]	One pitch per playing field
JUNIOR CRICKET - STAGE 2	Synthetic: 1	One pitch per playing field
JUNIOR CRICKET - STAGE 3	Synthetic or Turf: 1	One pitch per playing field
OPEN AGE - CLUB HOME OR CLUB SATELLITE	Synthetic: 1 Turf: 4–6	To accommodate weekly Country, Metropolitan and/or Junior Association fixtures. Turf management practices and affordability of preparation is likely to impact on the number of pitches that can be provided at this level of venue.
PREMIER CRICKET	Turf: 6–10	Dependent upon whether the venue is used for a range of State, Regional, Country, Metropolitan and/or Junior Association representative matches, in addition to regular weekly competition fixtures.

[1] While synthetic pitches are preferable for Stage 1 Junior Cricket, using one of the outer turf pitches of a centre wicket table, on in some cases a mown area of the outfield are also acceptable alternatives.



When determining the appropriate number of turf pitches for a site, it is recommended advice be sought from your State/Territory Cricket Association.

#### Dual turf and synthetic pitches

Dual turf and synthetic cricket pitch configurations are becoming more common in community cricket, particularly for landlocked communities with little green space to develop additional grounds.

Dual turf-synthetic pitch arrangements maximise facility usage whereby grounds previously used solely for turf competitions in the afternoon, can also be utilised for junior matches in the morning and weekday evenings. This enables not only optimum usage of the ground and a greater return on investment for landowners, but also promotes greater connectivity between junior and senior cricket and strengthens the player development pathway.

The flexibility of both turf and synthetic pitches allows use for centre pitch practice (match simulation) during mid-week training sessions, as well as a pre-match warm up facility for bowlers.

Before opting for a dual pitch arrangement, ensure communication and a healthy relationship exists between curator, club/s and other users of both turf and synthetic pitches. Dual turf-synthetic pitch configurations are most successful where pitch management programs are strong and incidences of pitch preparation or inclement weather (where covers must remain on) do not impact too adversely on the ability to use the synthetic pitch.

## Surface grades

Pitches should not have a grade (or gradient) steeper than 1% in any direction and should be constructed on a single plane. The playing field geometry will often dictate the allowable surfacae grade for the pitch/es.



The centre square/pitch should be elevated above the level of the outfield to allow for surface drainage off the pitch, and to protect the pitch from surface water run-off in a high rain fall event. The elevation should be gradual to ensure it is not a tripping hazard for users of the playing field (relevant for synthetic pitches only).

When designing playing field geometry, the following minimum and desired grades for pitches should be considered:

DIRECTION	GRADE	соммент
Cross-fall	1% (maximum)	Turf wickets can be constructed flatter (i.e. 0.5%) but would rely heavily on wicket covers to protect the surface in rain events.  Synthetic wickets, unless constructed on a freedraining base pavement, should always have a 1% grade.
Longitudinal fall	Flat	Unless site constraints dictate a need for longitudinal fall, cricket pitches should have no fall in the longitudinal direction.

Note: Diagonal grades for pitches are accepted as long as the resultant gradient is not steeper than 1%.

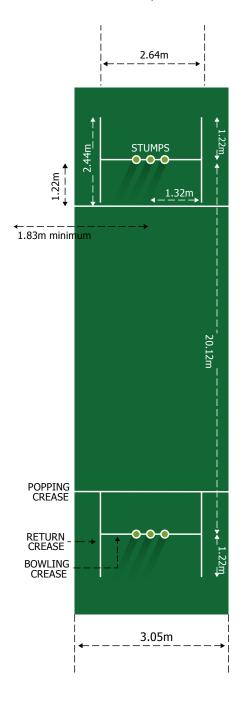


Where the outfield grades towards the wicket, look to locally raise the wicket block to protect it from surface run-off in heavy rain events. It is recommended the wicket block is not raised greater than 50mm and it is blended into the surrounding outfield so that it is not noticeable by a bowler.

## Line marking

PITCH AREA	DESCRIPTION
BOWLING CREASE	The bowling crease is the line through the centre of the three stumps at the relevant end. It is 2.64m in length with stumps in the centre.
POPPING CREASE	The popping crease is in front of and parallel to the bowling crease. It is 1.22m from the bowling crease. The popping crease is marked to a minimum of 1.83m on either side of the centre of the middle stumps and is unlimited in length.
RETURN CREASE	The return crease is at right angles to the popping crease at a distance of 1.32m either side from the middle of the stumps. The return crease must extend to a minimum 2.44m behind the popping crease but may be unlimited in length.

Source: Line marking details sourced via the WA Sports Dimensions Guide for Playing Areas.



## Natural turf pitches

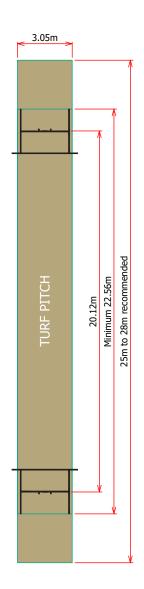
#### Geometry

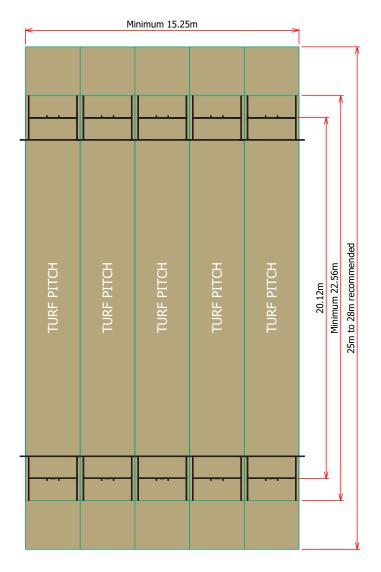
The following table details the minimum and desired dimensions for natural turf pitches.

GEOMETRIC ELEMENT	DIMENSION	COMMENT
LENGTH	22.56m (minimum) 25.00m — 28.00m (desired)	An increased length of 25m-28m allows the bowler to have multiple strides on the same wicket surface prior to delivery.
WIDTH	3.05m	Overall footprint of the turf table will be dependent of the level of competition being played and the number of turf pitches provided.



If designing a five pitch turf table, you will require a minimum area of 15.25m (width) by 22.56m (length) — not including extended bowler run-ups.





#### Composition

Turf used for a natural turf pitch is typically a dense, low-growing and highly resilient grass species that is able to withstand the wear and tear of regular use for cricket. When choosing a turf species it is important that the climate of the location is considered. In hotter and drier Australian climates warm-season couch grass varieties are preferred, however in colder Southern climates (e.g. Tasmania), Rye grass varieties can be used as an alternative. Some common characteristics of such turf include:

- Fine-bladed (e.g couch grass/rye grass)
- Low mowing height tolerance (e.g couch grass/rye grass)
- Resilience (e.g couch grass/rye grass)
- Drought tolerant
- Rapid recovery
- Disease resistance

#### **Profile**

Natural turf pitches are to be constructed from wicket soil which have a proven track record in the local area to produce high performing pitches.

- Typical characteristics of wicket soil are:
- High clay content (50–70%)
- Coarse sand <10%</li>
- pH (water) = 5-7
- Linear shrinkage ratio = 0.08-0.15
- Soil texture (Emerson class) >4
- Total soluble salts (ppm) <1,000.



Prior to procuring wicket soil, it is recommended that a sample of the preferred or available soil type is tested to ensure it is fit for purpose and site conditions.

#### Maintenance

All natural turf pitches / squares will require regular ongoing annual turf maintenance, as well as additional weekly pitch preparation during the playing season. It is important that cricket pitches are prepared hard and flat to produce a good playing surface for matches. The main activities undertaken to achieve this include, but are not limited to:

- Rolling
- Mowing at low heights
- Marking
- Scarifying
- Vacuuming
- Watering



Preparing and maintaining natural turf pitches to ensure greater longevity and optimal performance requires specialist skills developed from an appropriate level of training and education. It is recommended that venue managers and operators of natural turf pitches engage with specialists to prepare and maintain pitches and/or seek an appropriate level of education in order to facilitate general maintenance and preparation activities (e.g. rolling, mowing, scarifying, irrigating).



Image courtesy of SportEng



Turf pitch covers, as well as a designated storage area for the covers are an important consideration when preparing and maintaining natural turf pitches.

When not in use, storing the covers on some synthetic grass (outside the field of play and run off area) is an option to prevent potential damage to natural turf (resulting from heavy rolled up pitch covers being placed directly onto the playing field surface).



#### ESD considerations

ESD considerations when designing and maintaining a natural turf surface include:

- Ongoing maintenance is required to keep the natural turf pitch fit for purpose.
- In order to keep the natural turf pitch in a longer service life, pitch rotation for games is recommended to allow a used pitch to recover.
- Recycled water or rainwater can be used for irrigation purposes to reduce water usage, however ensure the water quality is tested first to ensure suitability for the turf.

## Synthetic grass pitches

#### Geometry

The following table details the minimum and desired dimensions for synthetic turf centre pitches.

GEOMETRIC ELEMENT	DIMENSION	COMMENT
LENGTH	25m (minimum) 28m (desirable)	An increased length of 28m allows the bowler to have multiple strides on the same wicket surface prior to delivery.
WIDTH	2.4m (minimum) 2.8m (desirable)	Providing a pitch of adequate width is particularly important for junior development (promotes greater enjoyment if juniors are able to land the ball on the pitch) and also encourages the art of spin bowling with players able to pitch the ball wide on the pitch and spin it into or away from the batter.

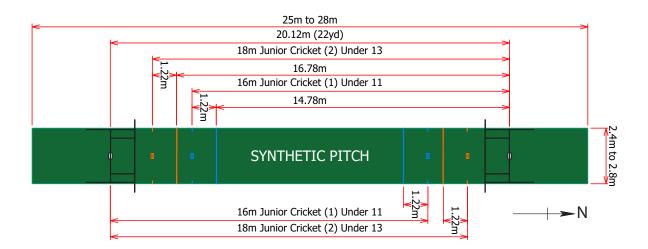
Stage 1 and Stage 2 Junior Cricket formats call for pitches that are shorter than the minimum recommended full-size pitches (16m and 18m stump-to-stump respectively). It is recommended that all synthetic pitches are developed to the dimensions listed in the above table in order to maximise their use for all forms of cricket. Refer to the pitch marking diagrams below for recommendations on how pitches can be marked to provide for a full range of junior and senior cricket.



Should the site or ground conditions prevent their use for full sized pitches or grounds, reduced sized pitches may be considered. In this instance, please contact your relevant State or Territory Association to discuss the relevant options. Refer to Appendices for relevant contacts.



Note: Stage 3 Junior Cricket is played on a standard pitch length (20.12m) and does not require unique pitch markings.



#### Synthetic grass materials

Current synthetic grass products on the Australian market used for most cricket pitch applications have a pile height that range from 9mm-13mm without any sand or crumbed rubber filling.

While there are a range of products available for use as synthetic pitches, Cricket Australia recommends that the proposed system is researched to ensure it has a proven track record and addresses the key functions of:

- Suitable playability for the intended level of use
- High durability

Below is a selection of technical properties for synthetic grass products that identify both minimum requirements and increased properties to improve durability.

PROPERTY	MINIMUM REQUIREMENTS	IMPROVED DURABILITY
UV STABILISATION  UV stabilisation helps prevent the synthetic grass from fading, discoloration, or degradation caused by prolonged exposure to sunlight.	Suited and proven for Australian climate	
YARN MATERIAL	Polypropylene	Polyethylene
INDIVIDUAL YARN WEIGHT  Measurement of the mass or thickness of the individual fibres that make up a synthetic grass product.	1,200gm/m2	1,500gm/m2
YARN WEIGHT (DTEX) Unit of measurement used to express the linear density of fibres.	8000–8800	>8800
YARN PROFILE Shape or cross-sectional structure of the individual fibres.	Fibrillated tape	Texturised monofilament



If regularly maintained, the life cycle of synthetic grass matting is approximately 6-8 years. This is dependent on how the grass is covered during the off-season (synthetic cover or soil) and usage levels.

Products that meet the improved durable properties may result in twice the durability than a product that only meets the minimum requirements.

#### Pavement / profile

Synthetic cricket pitches comprise of a base pavement with a short pile height synthetic grass pitch matting glued to the pavement. The cricket pitch base pavement should be designed to cater for the relevant site's subgrade conditions and maintain the level tolerance of the surface for a minimum design life of 20 years.

Synthetic pitch pavement bases are typically a rigid pavement i.e. concrete. Concrete pavements are generally easy to construct and have a proven track record in Australia.

Flexible pavements (i.e. asphalt and granular materials) are used in areas outside Australia with some level of success. While these are not widespread methods used across Australia, Cricket Australia is committed to researching alternative techniques and methodologies over time.

#### Pitch covers

Synthetic cricket pitches may need to be covered during the off season to both protect the surface and for the safety of other sport participants. Two options are recommended for synthetic cricket pitch covering, both of which should be conducted with consideration given to Work Health and Safety, risk management and playability for non-cricket users. Alternate season use of playing fields and the compatibility of synthetic pitch covering methods with other sporting codes needs to be considered when determining the need for and most appropriate pitch covering option.

PITCH COVERING METHOD	IMPACTS AND CONSIDERATIONS
SYNTHETIC PITCH COVERS	Synthetic pitch covers can be placed over synthetic pitches during the winter season. When using synthetic pitch covers it is also important to consider, and where possible adhere to, AFL–Cricket Australia approved synthetic grass product performance and testing standards. Synthetic covers will require the brooming in of rubber, plastic or organic granules when laid.
	Storage of covers over the off-season is a key consideration. Issues can arise if these covers are stored whilst still wet as the moisture is unable to escape and can damage the cover. Achieving integration of synthetic surface and natural grass interface can be challenging. Installation and removal of synthetic pitch covers can be labour intensive, and Work Health and Safety provisions should be adhered to.
COVER WITH SOIL	Covering synthetic pitches with soil during the off season is another pitch covering method and is generally managed by the relevant Council or cricket club. Heavy duty industrial plastic should be laid over the synthetic pitch surface prior to soil being spread.
	Issues with using soil include the potential injury to untrained club volunteers attempting to cover/uncover cricket pitches and potential injury risk due to change in surface level around the pitch.
	Damage to pitch as a result of machinery/tools tearing sections of the synthetic grass are also common and an uneven and raised surface surrounding the pitch can result in either an unpredictable deviation of the ball once in play or a 'swimming pool' effect whereby rainfall is unable to escape the pitch and can impact on the ability to commence play.





Consider where the cricket pitch cover will be stored during the season.



#### Synthetic grass maintenance

Synthetic cricket pitches require regular maintenance to ensure their quality, playability and integrity is maintained. Regular sweeping is required, and pitches should be water blasted every two years (minimum) to promote and refresh the synthetic pile.

To assist with the maintenance of synthetic cricket pitches, pitch surrounds and to provide safe and consistent run-ups for bowlers, the installation of hybrid turf surrounds to synthetic pitches could be considered.

#### ESD considerations

ESD considerations when designing and maintaining a synthetic grass surface include:

- Increased CO<sup>2</sup> omissions during the production, transportation and end of life disposal phases.
- Synthetic grass does not decompose, meaning unless it is repurposed, it will end up in landfill (Note: Research continues into future synthetic grass recycling opportunities, with planning underway for Australia's first purpose built synthetic grass recycling hub).
- Pending condition, synthetic grass may be repurposed, in-turn delaying disposal to landfill.
- Compared to natural turf pitches, synthetic grass pitches require less maintenance and need no watering for play.

## GUIDANGE NOTE OS

# OUTDOOR TRAINING FACILITIES

#### Introduction

Outdoor cricket training facilities are a core component of venues across all levels of community cricket. Training facilities (or "cricket nets or training nets" as they are often referred to) often provide the setting for a young player's first experience, as well as providing an integral platform for ongoing player skill acquisition and development.

The functionality, purpose and use of cricket training facilities has evolved over time, however the majority of clubs view them as the primary training facility and one of the few facilities that can accommodate multiple players training simultaneously.

This Guidance Note provides information and recommendations regarding the following aspects related to outdoor cricket training facilities:

- Hierarchy
- Configuration
- Orientation
- Dimensions
- Grade
- Structural form
- Pile height
- Multi-use
- Supporting amenities



Throughout this Guidance Note, design and planning tips and references to ESD considerations and maintenance recommendations are also provided.

## **Hierarchy**

The number of training nets required per venue is dependent on a number of factors, including:

- Level of competition played
- Type of competition turf or synthetic
- Number of playing fields the training nets service
- Venue hierarchy classification
- Size of tenant club/s and number of teams
- Training schedules and weather impacts
- Cost of provision and maintenance

There is no 'one-size-fits-all' approach to training net provision. The following table provides a guide as to a desired level of provision (number of nets/pitches and surface types) for differing levels of competition and club sizes.

These minimums should be designed and developed with the potential to expand net structures and pitches as needs grow.

LUEDA DOLIN LEVEL	NUMBER OF TRAINING PITCHES		
HIERARCHY LEVEL	SYNTHETIC	TURF	
PREMIER (TURF)	2–4*	9–12	
CLUB HOME (TURF)	3–4*	6–9	
CLUB HOME (SYNTHETIC)	3–6*	0	
CLUB SATELLITE	2* (desirable)	0	

<sup>\*</sup>Preferably two, but at a minimum, one synthetic training net/pitch should remain publicly accessible at all times (i.e. not enclosed, locked or gated off).



When determining the appropriate number of turf training pitches, take into consideration the need for individual pitch rest and preparation (rotation) periods. It is recommended advice be sought from your State/Territory Cricket Association when planning natural turf training facilities.

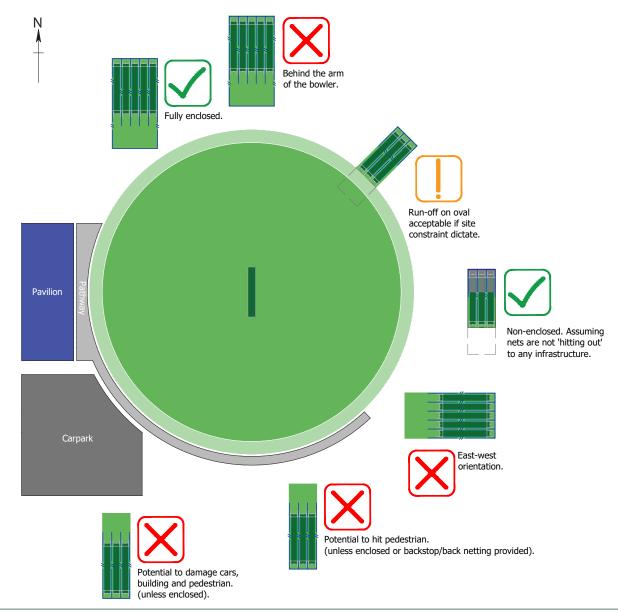
#### Location

Dependent on cricket training net design and surrounding infrastructure and open space, the most suitable location for training nets will differ. Enclosed training net facilities (discussed in more detail in the following pages) allow greater flexibility in terms of location as training activities are confined to a specific area. Non-enclosed training facilities, where the ball can be hit beyond the net structure, require more careful placement to minimise the risk of injury to a person or damage to property.

As depicted by the following diagram, the following planning principles should be considered when determining the most suitable location for cricket net development.

Cricket Australia's preference is to locate practice enclosures (including bowler run ups) off the field of play, for the following reasons and benefits:

- Protects the playing field surface from intense levels of use
- Enables the practice facility to be utilised concurrently while the playing field is being used
- From a safety perspective, points of conflicts are removed, particularly with users of the practice nets with their backs turned to the centre wicket
- Greater level of flexibility in the use of the practice nets, especially if fully enclosed





Whilst it is recommended that bowler run up areas be located off the field of play and outside of the minimum run-off distance, site constraints (particularly in inner urban areas) may mean there is a requirement for bowler run up areas/run off areas to slightly encroach onto or near the field of play. If the bowler run ups are a synthetic surface, the synthetic product should meet Australian Football League-Cricket Australia approved synthetic turf product performance and testing standards. Users should also remain vigilant and be made aware of the change of surface type and potential trip/impact risks.



The above image (courtesy of City of Unley) is of the outdoor training facilities at Kingswood Oval in South Australia. The darker green area of the bowler run ups (bottom right hand corner) overlaps with the field of play/run-off area for Cricket and Australian Rules Football. This overlapping area has been covered with an approved AFL/CA approved synthetic turf product.

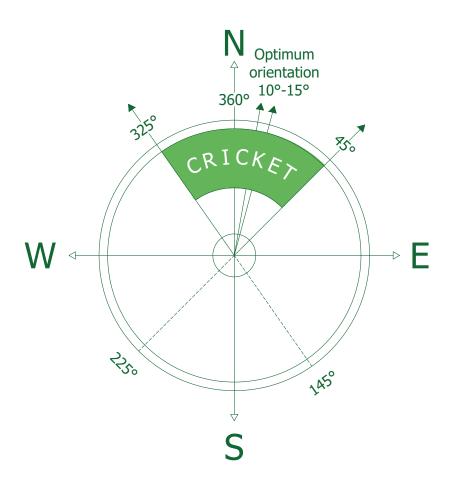
Other considerations when planning locations or designing spaces with cricket training nets include:

- Accessibility and availability for community use
- Proximity to trees that create impacts from leaf debris, root ingress, shadowing causing issues for batter visibility and increasing likelihood of mould build up
- Avoid using mulch (or similar) in garden beds or granitic sand on pathways surrounding training nets, as these materials often impact the pitch area
- Located on 'higher land' to minimise impacts of flooding
- Backdrop or vegetation behind bowler's run-up impacting player visibility
- Proximity to other site infrastructure (e.g. shared pathways).

## **Training net orientation**

The orientation of cricket training nets is equally as important as the main field of play. The time of day (early morning or late afternoon) and the time of year (winter or summer) has a bearing on optimum orientation.

Cricket training nets should have a north-south orientation with an ideal rotation of 10–15 degrees east of north and a maximum rotation of 45 degrees east of north or 35 degrees west of north. The latter requirement is particularly important for the safety of players as training is usually conducted in the later afternoon or evening when the sun is setting.





It is important to recognise that local conditions may override these recommendations and each site and associated conditions should be treated individually.

## **Training pitch dimensions**

#### Natural turf

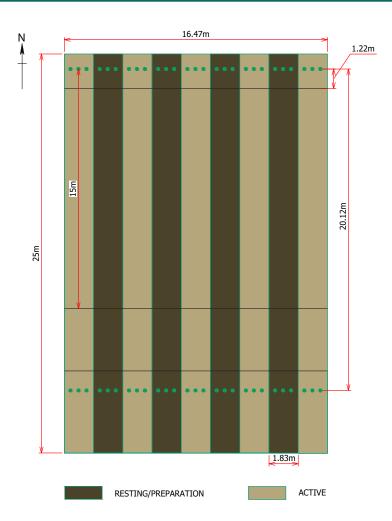
The following table details the minimum and desired dimensions for natural turf training pitches.

GEOMETRIC ELEMENT	DIMENSIONS	COMMENT
LENGTH	15m (minimum) 25m (optional)	While full length turf training pitches are recommended, a minimum length of 15m (approximately three quarters of a full-length pitch) could be considered to assist clubs in managing the cost of turf pitch development, preparation and ongoing maintenance.  An increased length of 25m allows the bowler to have multiple strides on the same wicket surface prior to delivery.
WIDTH	1.83m (minimum) 2.4m (optional)	2.4m wide pitches will provide a closer 'match simulation' experience however are not essential.

**Note:** Overall footprint of the training pitch table will be dependent of the number of training pitches provided and level of competition being played.



It is recommended that both the rotating and preparation processes related to turf cricket practice nets be managed in consultation with an agronomist



## Synthetic grass

The following table details the minimum and desired dimensions for synthetic grass training nets and pitches. It should be read in conjunction with the designs provided on the following pages and Australian Standards 1725.4 and 1725.1.

ITEM	MEASUREMENT	NOTES
Individual training lane width	3.6m	All training lanes should have a minimum width of 3.6m
Pitch width	2.4m*	A 2.4m pitch width is recommended, in line with the pitch width for centre synthetic pitches.  *Covering the full width of the training lane (3.6m) with the same synthetic grass product as the pitch is also a suitable design option.
Pitch length (from stumps at batter end)	22m	A measurement of 22m from stumps at the batter end to the end of the pitch at the bowler's end will ensure the bowler's final delivery strides and ball release are undertaken on the same surface/level (base and synthetic surface).
Roof height(s)	3m 3.6m	AS 1725.4 outlines two industry adopted roof heights of 3m or 3.6m for outdoor training facilities.  If opting for a full pitch length roof design (see below), a 3.6m roof height is recommended to enable ball flight opportunities for spin bowling.
Roof length(s)	6m 9m Full pitch length (back net to stumps at bowler's end)	AS 1725.4 outlines two industry adopted roof lengths of 6m or 9m for outdoor training facilities.  A shorter 6m roof length will enable greater ball flight for spin bowlers and may limit the number of errant balls landing on the roof, however will increase the likelihood of balls being struck out of the nets, potentially causing injury or damage to nearby property/vehicles.  A 9m roof length will still enable adequate ball flight for spin bowling as well as providing some additional protection for neighbouring/nearby infrastructure (e.g. car park, pavilion) and facility users/general public passing by.  A full pitch length roof (from back netting to bowler's stumps is considered an appropriate design response in areas with limited space (i.e. eliminates risk of injury and/or damage to neighbouring property/vehicles). It is also an effective design solution should the direction of the nets be 'hitting towards' other infrastructure (i.e. shared pathway, playground, car park). Inclusion of a small drop net/apron at the end of the roofing (above the stumps at the bowler end) can also minimise balls being struck out of the practice facility enclosure.
Netting/fencing length (from back netting/fencing to stumps at bowler end)	21.12–22.12m (minimum) 25m recommended)	The length of dividing netting will be dependent on the 'buffer distance' behind the batter (see below), however it should in all cases extend at a minimum to the stumps at the bowler end (21.12m-22.12m).  Extending the length to 25m will further mitigate the risk of injury resulting from balls ricocheting from adjacent lanes and potentially tripping bowler's during their run-up.
Bowler run-up length (taken from popping crease)	12.1m	A 12.1m run-up length is recommended.  Space permitting, longer run ups should be considered to facilitate fast/pace bowlers (particularly for higher level training) who generally require a longer run up.  Bowler run ups should not extend onto the field of play, and if located within 3m of an AFL boundary line, should be surfaced with the AFL-CA approved synthetic grass product.

ITEM	MEASUREMENT	NOTES
'Buffer distance' behind batter stumps and back netting	lm-2m	A 1m-2m 'buffer distance' between the stumps at the batter end and the back netting is recommended to:  Minimise damage to the netting and/or equipment (e.g. bat) as a result of batter striking the net during stroke follow through.  Reduce the risk of injury to the batter as a result of the ball ricocheting directly back into them (from a close distance).  Provide space behind the batter to enable controlled wicket keeping training activities/drills  Promote batting stroke/technique work (e.g. ramp/lap sweep) without the confines of a net directly behind the batter.
Total lane length (including bowler run-up and distance between stumps at batter end and back netting)	32m-33m	The overall length of a training facility will be dependent on the chosen buffer and bowler run-up distances, however should not be less than 32m.
Total lane width will be dependent on the number of training lanes, however should be a multiple of 3.6m	Dependent on number of training lanes	It is recommended Club (home) facilities have a minimum three training lanes which would equate to a 10.8m overall width.
Pitch surrounds and part bowler run up	Pitch surrounds — 0.6m either side of pitch Part bowler run up — 9m (not including pitch)	It is recommended the full width (including bowler run up areas) of an outdoor practice facility be on the same concrete base, however the pitch surrounds and bowler run up area can be of an alternate compacted hard surface. A slightly longer pile synthetic grass may also be used on these areas, however try to avoid any 'step-like' changes to minimise ball deviation and/or inconsistent surface types/ levels for bowlers.

#### Grade

Outdoor synthetic training facilities should not have a grade (or gradient) steeper than 1% in any direction and should be constructed on a single plane.

DIRECTION	GRADE
Cross-fall	1% (maximum)
Longitudinal fall	Flat

Note: Diagonal grades for outdoor training facilities are accepted as long as the resultant gradient is not steeper than 1% in any direction.



For Occupational Health and Safety measures, it is a requirement that both the dividing (centre) and peripheral netting be a minimum length of 21.12m or 22.12m (depending on 'buffer distance' between stumps at batter end at back netting) for the protection of bowlers in adjacent nets. A length of 25m is however recommended to allow for extended bowler run-ups and bowler protection.



Junior pitch markings (at the bowler's end only) should also be provided in synthetic training nets in line with the below table. Refer to Guidance Note 02 Playing Pitches for junior pitch markings measurements

NUMBER OF TRAINING NETS AT FACILITY	MINIMUM NUMBER OF TRAINING NETS REQUIRING JUNIOR PITCH MARKINGS
1	1
2	2
3	2
4–5	3
More than 5 nets	50% of nets



Image courtesy of City of Unley

# Structural form options

Depending on the intended level of use and the training pitch surface, there are a range of different structural forms for training net enclosures:

- Rigid
- Retractable
- Curtains
- Tunnels

The following pages provide an overview of each option.

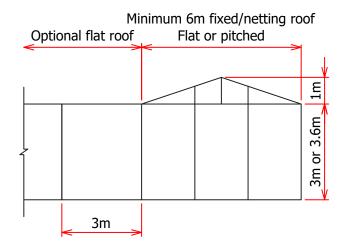
# Rigid

Use of chain-link mesh fence to create fixed dividers with chain-link mesh roof.





The installation of chain-link mesh to both sides of the internal/dividing fencing/poles will help to minimise balls ricocheting.



# Rigid Outdoor Training Facility Design



#### Retractable

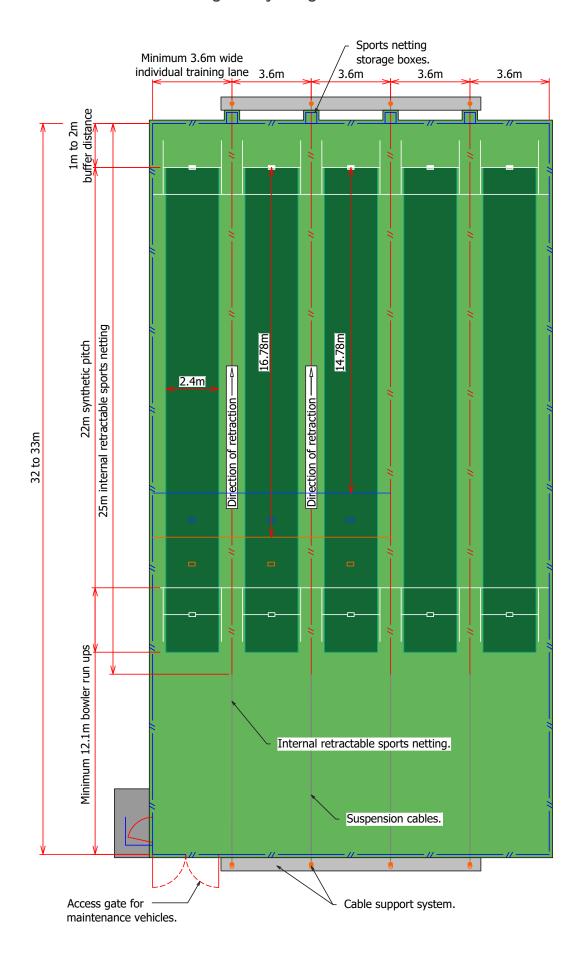
Retractable soft netting lane dividers (provided in the direction of the training pitches) that can be drawn back into storage boxes at one end of enclosure. Requires soft roof netting due to the open span of the facility.



Image courtesy of SportEng



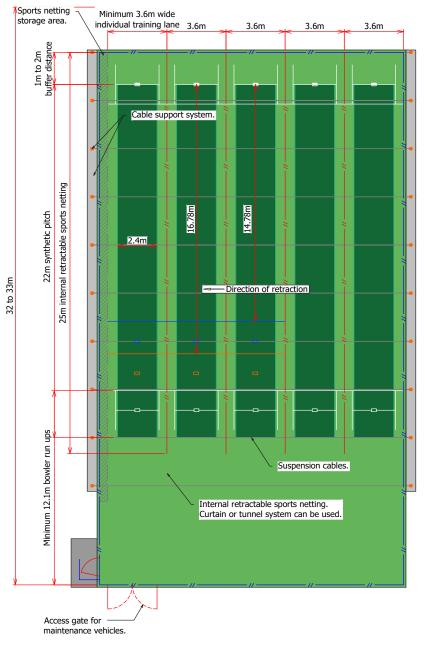
#### **Retractable Outdoor Training Facility Design**

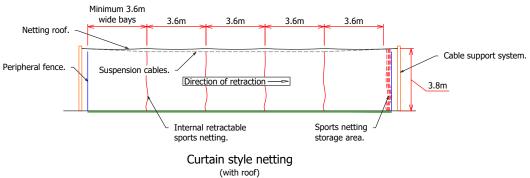


#### Curtains

Soft netting lane dividers that slide perpendicular to the direction of the training pitches. When not in use they can be stored in large pouches on side of the facility. Requires soft roof netting due to the open span of the facility.

#### **Curtains Outdoor Training Facility Design**

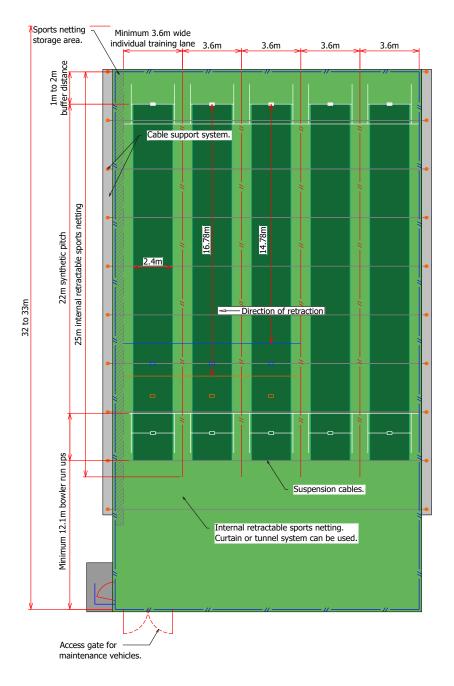


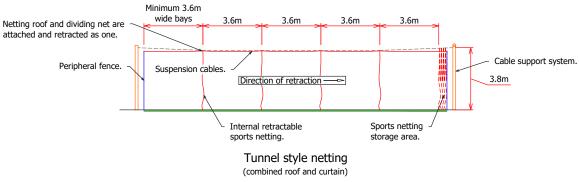


#### **Tunnels**

Soft netting tunnels (i.e. lane dividers and roof stitched together) to provide fully enclosed lanes that slide perpendicular to the direction of the pitches.

#### **Tunnels Outdoor Training Facility Design**





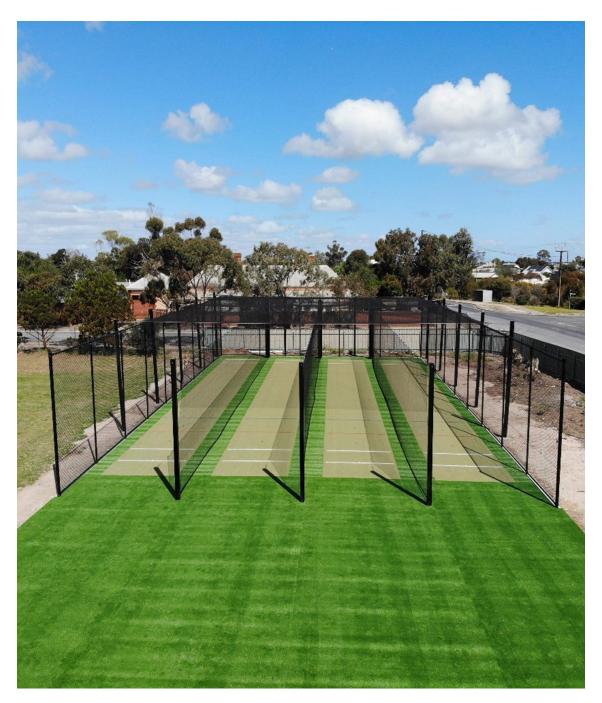
# Advantages and disadvantages

The following table provides a list of advantages and disadvantages for each of the options, as well as an indication of cost compared to other options.

ТҮРЕ	ADVANTAGE	DISADVANTAGE	COST RANGE
RETRACTABLE	<ul> <li>Provides a flexible space for multi-use</li> <li>Soft netting can be secured in lockable storage boxes</li> <li>Suitable for turf practice pitches</li> </ul>	<ul> <li>Fixed locations</li> <li>Soft netting can sag/billow out in high winds</li> <li>Soft netting can readily be vandalised if not locked away in storage boxes</li> <li>Large structural elements (i.e. posts) required to operate the system</li> <li>Gap between roof netting and retractable lane dividers can result in balls entering into adjacent lanes. Will require baffle/apron off roof to close the gap.</li> </ul>	\$ (low-mid)
RIGID	<ul> <li>Use of relevant Australian Standard AS 1725.4–2010.</li> <li>Durable</li> <li>Fixed chain-link roof structure prevents balls from entering adjacent lanes</li> <li>Suitable for open public lane use</li> </ul>	<ul> <li>Limited use other than for cricket</li> <li>Not suitable for natural turf pitches (i.e. prevents efficient pitch maintenance and preparation)</li> <li>Higher level of wear and tear on cricket ball.</li> </ul>	\$\$ (mid)
CURTAINS	<ul> <li>Provides a flexible space for multi-use</li> <li>No storage boxes</li> <li>Greater level of flexibility for lane location set-up</li> <li>Suitable for turf practice pitches</li> </ul>	<ul> <li>Not suited for open public lane</li> <li>Soft netting can sag/billow out in high winds</li> <li>Soft netting can readily be vandalised if not in a fully locked enclosure</li> <li>Large structural elements (i.e. posts) required to operate the system</li> <li>Gap between roof netting and curtain lane dividers can result in balls entering into adjacent lanes. Will require baffle/apron off roof to close the gap.</li> </ul>	\$\$\$ (mid-high)
TUNNELS	<ul> <li>Provides a flexible space for multi-use</li> <li>Lane dividers and roof stitched together means no gaps for balls to enter adjacent lanes.</li> </ul>	<ul> <li>Soft netting can sag/billow out in high winds</li> <li>Soft netting can readily be vandalised if not in a fully locked enclosure</li> <li>Large structural elements (i.e. posts) required to operate the system.</li> </ul>	\$\$\$ (high)



If considering a combined rigid and retractable netting design, ensure the design is developed by a suitably qualified sporting infrastructure design professional.



Images courtesy of PM Sports

# Multi-use training facilities

Multi-use training facilities incorporating cricket practice nets are growing in popularity due to their flexible nature and capacity to accommodate a range of activities and uses. To enable the flexibility of the space, the facility must incorporate nets rather than the rigid fixed chain-mesh fences.

Significant interest has been identified for multi-use training facilities as they also ensure investment into community facilities creates benefits outside of summer cricket training.

A typical range of multi-use training facilities developed to date, include configurations that accommodate training for the following sports (in addition to cricket):

- Netball
- Baseball
- Soccer/futsal
- Lacrosse
- AFL
- Rugby
- Hockey

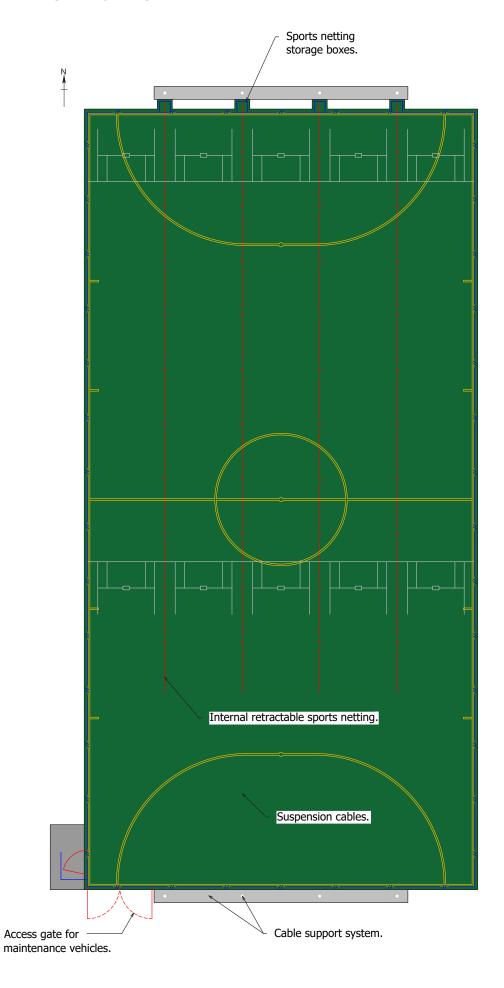
The principles of cricket net design can be integrated within multi-use facilities including safety, compliance, accessibility and game development. Multi-use innovations are more likely to be supported where they can demonstrate adherence to these principles and still provide fit-for-purpose cricket training nets that are flexible for other activities.

In all multi-use training facility projects, it is difficult to pre-empt all community activity that could be considered compatible with cricket. Final use and design of facilities is often a result of club, community and Council consultation and it is recommended that this process be utilised to ensure maximum benefit can be achieved for all.

Note: While the multi-use cricket facilities space is readily opened up due to the use of retractable, curtain or tunnel nets, there will still be limitations due to the permanent roof net.



Image courtesy of Glen Eira City Council



# **Supporting infrastructure**

## Power supply

A nearby power supply to outdoor training nets enables the operation of electronic bowling machines. Bowling machines typically operate on 240 volt power requirements, but always check machine requirements with the manufacturer before installing power. Be mindful that electricity cords do not become trip hazards and ensure they avoid contact with water. The recommended location is to install the power supply nearer the bowler's end of training facility.



# Lighting

Refer to Guidance Note 06: Floodlighting for training facility lighting requirements (e.g. pole location, lux levels).

# **Drinking fountains**

Installation of a drinking fountain can support players and spectators to stay hydrated during training. It can also reduce the impact on the environment by using less singleuse plastic.

The location of drinking fountains should be easily accessible by players and spectators. The material of any water fountain should be suitable for outdoor use to prevent damage from the environment. Flow metre gauges can be installed to monitor water usage.



# Drainage infrastructure

Drainage lines should be installed to drain the water that sheets off practice pitches. For a synthetic grass practice enclosure, this would typically consist of a spoon drain on the two low sides of the facility. Alternatively, if there is sufficient space and the adjacent area is grading away from the facility, the run-off could be directed to adjacent landscape areas.

# Irrigation network (natural turf only)

An irrigation network is required for both the natural turf pitches and the natural turf run-ups. There should be a clear delineation in the operation of the two so that neither overspray onto the other, particularly the run-up network onto the turf pitches.

Quick Coupling Valves (QCVs) are required for hand watering of the turf wickets.

# Rubber protective matting

Rubber net edging minimises the damage to cricket balls as a result of impact with the fence. It also increases the longevity of fencing through absorption of ball impact. Ensure fence posts have the capacity to support rubber matting.



# Sight screens

Where applicable, sight screens should be considered at both ends of the nets. If installing a sight screen at the batter's end (to assist the bowler's ability to see a ball struck back in their direction, particularly during power hitting training activities), consider safely erecting/fastening a temporary sight screen. This will enable greater flexibility and clear visibility (if removed) for a coach wishing to stand behind the training lane to conduct batter/bowler performance or technique assessments. It also enables the colour of the sight screen to be changed pending the colour of cricket ball being used. Refer to Guidance Note 01: Playing Fields for more details on sight screens.

# GUIDANGE NOTE O4

# INDOOR TRAINING **FACILITIES**

# Introduction

Indoor training facilities provide an alternative to outdoor training environments and an opportunity to train and facilitate programs and activities free of weather and climatic conditions. Indoor training facilities are categorised within the Guidelines as training only environments, with Indoor Cricket facilities addressed separately in Guidance Note 05: Indoor Cricket.

With a limited provision across Australia, dedicated indoor training environments and facilities are not widespread and have a limited history of guidance, common levels of provision and standards for facility owners and managers to work towards.

The purpose of this Guidance Note is to bring technical knowledge of indoor structures and the "training field of play" into one collective set of information for future reference. Topics covered within this Guidance Note include:

- Venue attributes
- Venue design considerations
- Training net area
- Supporting infrastructure

Throughout this Guidance Note, design and planning tips and references to ESD considerations and maintenance recommendations are also provided.



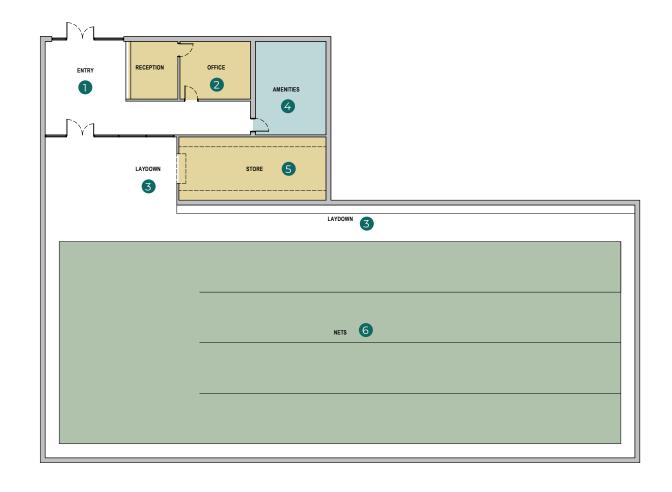
Image courtesy of Cricket Victoria

# Venue attributes

The following table and associated venue layout plan provides a guide to the typical venue attributes that should be included within a dedicated indoor training facility. Each and every area or attribute should be considered and determined whether it is required for your venue, and every indoor training facility should be professionally designed based on the projected use/users.

AREA / ATTRIBUTE	DESCRIPTION	TIPS
ENTRY / RECEPTION  1	The main entry needs to present a window into the operation beyond it, providing a friendly, welcoming and accessible space. Typically, a reception desk with Point of Sale (POS) system should be available to manage payments and bookings.	<ul> <li>Ensure the entry area does not also act as the venue "kit laydown area" and alternate space is provided.</li> <li>Link reception area to the venue office to increase the functionality to support operations with limited staffing numbers.</li> </ul>
OFFICE 2	A venue management office is recommended to support venue operations. The size and components of the office should be determined through a facility scoping exercise.	<ul> <li>Typically the office should be fitted out with desk and cabinetry to support the number of users and be cabled with relevant digital technology.</li> <li>A connection from the office area to reception desk will assist in minimising staffing numbers where multiple functions can be accommodated.</li> </ul>
KIT BAG LAYDOWN / SHELVING / STORAGE  3	Typical indoor training facilities will have multiple teams waiting to use the nets while the active team conducts their training. The overlap of teams and users creates a need for a dedicated laydown area for kit bags outside the training net area. This laydown area should not impact on required circulation spaces or building egress. The area required for kit bag laydown is dependent on the number of lanes provided and the number of participants expected to use the space.	<ul> <li>A typical senior kit bag will require Isqm of space, which is inclusive of circulation. If there are 20 participants waiting to access the training facility, the lay down area should be at least 20sqm.</li> <li>Consideration may be given to the provision of shelving or "pigeon holes" capable of storing kit bags. Shelving can be positioned around the extremities of the building or provide a divider within the laydown area. Shelving allows for a more efficient stacking of kit bags (potentially 2 to 3 bags high), however should not exceed 1200mm in height. Kit bag shelving should be 600mm deep.</li> </ul>
AMENITIES  4	If there are no amenities near to, or servicing the indoor training facility, then the facility will need to provide its own amenities. The number of amenities is dependent on multiple factors including the number of lanes and if any other facilities are included in the building. Amenities should be easily accessible from the training net area and provide private, lockable toilet and changeroom spaces to accommodate all users.	<ul> <li>Consider principles of universal access and all gender provision when designing toilets and showers</li> <li>Ensure accessible amenities are provided pursuant to the NCC.</li> <li>Ensure sanitary bins are provided in toilet amenities.</li> </ul>

#### **EQUIPMENT** Internal storage rooms should be Storage rooms should have STORAGE designed with shelves to maximize a lockable roller shutter storage room capacity. Storerooms should and be lined with durable be located internally within the facility. materials such as plywood or fibre cement sheet to provide The store size should be sized increased durability. appropriately for the facility's operating needs and may include multiple areas. Providing adequate space and Overall, between 30sqm and 40sqm of access for wheeled equipment storage is required to support an indoor such as trolleys and equipment training facility. bags should also be considered. Storage areas and their access should be located outside the netted training area but have easy access to the netted space. TRAINING NET Refer to following training net layout and ■ The minimum number of AREA related dimensions. training lanes recommended for an indoor training facility is four, however additional 6 lanes will provide greater programming capacity and flexibility. It is recommended a Business Case be developed for all indoor training facilities prior to design to identify likely usage levels and related provision requirements.



# Venue design considerations

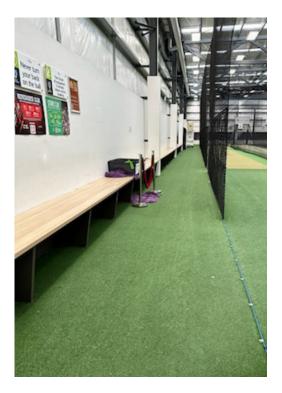
### Clearances and circulation

Clearances around the netting is critical for circulation and safety. Allow for 2000mm wide circulation space along the sides of the nets, parallel with the lanes. This will allow for two people to pass each other. Also allow for kit bag shelving adjacent this circulation space. Kit bag shelving should be 600mm deep. Allow for a 1000mm circulation space at the rear of the nets.

Maintaining an adequate clearance space between the roof netting, building structure and services (e.g. lighting, fans/air conditioning, fire services) is an important design consideration and should be determined via a site specific assessment.



The clearance space between roof netting and the above building structure and services should take into account the potential spring of netting.



Circulation space adjacent to netting

Image courtesy of Cricket Victoria

# Natural daylight and ventilation

Natural daylight is preferred wherever possible. Skylights or polycarbonate roofing can be a great way to introduce daylight to an indoor space. Ensure selected products filter / diffuse the light so that direct sunlight does not cause glare issues for players.

Windows at high level can also provide good access to natural daylight. High level windows are preferred to low level windows due to the improved security they offer and better depth of light penetration into the building. Windows should be positioned or appropriately shaded so that glare does not impact players.

Air-conditioning of indoor cricket training facilities can be cost prohibitive. Therefore, natural ventilation must be considered as part of the design response. Architects should review the direction of prevailing winds to determine the optimal placement of windows or fixed louver openings. Windows can be supplemented by air extraction fans or ceiling fans to enhance the natural ventilation of the space by providing additional air circulation.

#### Material and colour selection

The selection of colours in the building space needs to be carefully considered to work with the net and ball colours. This is particularly important behind the batter and the bowler to promote visibility of the ball.

Materials selection should prioritise durability. Plasterboards should be avoided and more durable materials such as plywood, fiber cement sheet, blockwork or masonry are preferred. This is particularly important where there is a risk of balls hitting the linings or in high traffic / high use areas such as the kit bag laydown area.

# Signage and occupant safety

Signage plays an important role in promoting occupant safety in indoor cricket facilities. Signs can indicate where players should wear protective gear, where spectators should stand, and where equipment should be stored. This helps to prevent accidents and injuries that could occur. In addition to the general building wayfinding and statutory signage, additional types of signage to be considered include:

- Identifying high risk areas / no standing zones
- Identifying spectator viewing points
- Location of first-aid kits or first-aid rooms

Signage should be clear and legible, and located in easy-to-read, logical positions.



Image courtesy of Cricket Victoria

#### Acoustics

Acoustics is an important consideration, especially within spaces that have adjacent uses or share common walls with neighbouring properties. The design should include sound-absorbing materials to minimise noise, vibration and echo.



Consider using multiple pitch colours to accommodate vision impaired players. A white ball on a beige pitch is typically difficult to see.

# Training net area

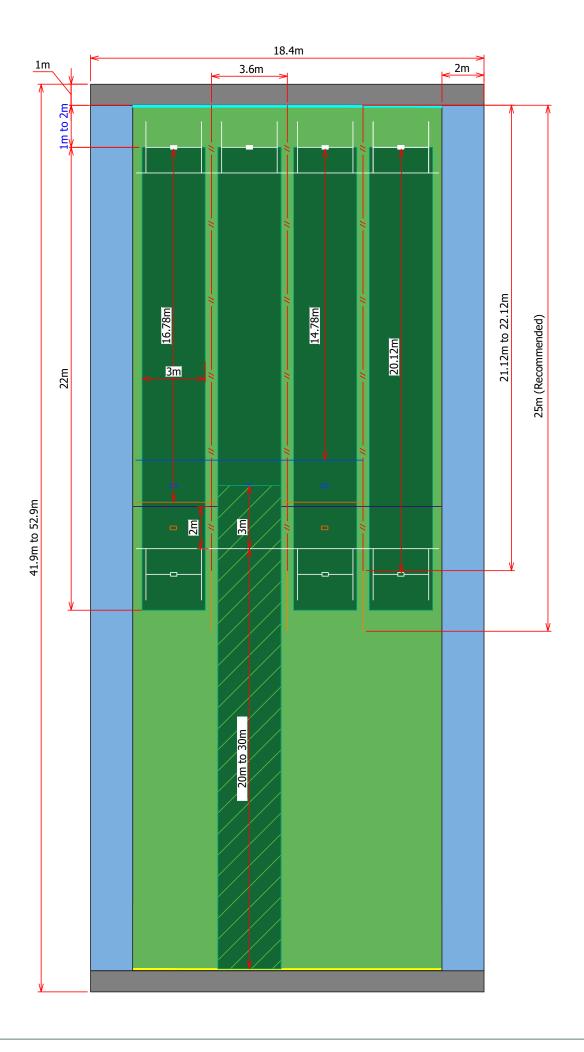
The following table provides a summary of the preferred indoor training net layouts and dimensions. It should be read in conjunction with the design provided on page 92.

ITEM	MEASUREMENT	NOTES
Circulation space / safety margin (rear of netting)	lm	<ul> <li>Adequate offset and circulation space beyond the net is required to protect spectators/non-users of the nets from coming into contact with a player and/or ball impacting/striking the net.</li> </ul>
Circulation space / safety margin (side of netting)	2m	<ul> <li>Adequate offset and circulation space beyond the net is required to protect spectators/non-users of the nets from coming into contact with a player and/or ball impacting/striking the net.</li> </ul>
Individual training lane width	3.6m	
Pitch width	3m	
'Buffer distance' behind batter stumps and back netting	lm-2m	<ul> <li>A 1m-2m 'buffer distance' between the stumps at the batter end and the back netting is recommended to:</li> <li>Minimise damage to the netting and/or equipment (e.g. bat) as a result of batter striking the net during stroke follow through.</li> <li>Reduce the risk of injury to the batter as a result of the ball ricocheting/bouncing directly back into them (from a close distance).</li> <li>Provide space behind the batter to enable controlled wicket keeping training activities/drills.</li> <li>Promote batting stroke/technique work (e.g. ramp/lap sweep) without the confines of a net directly behind the batter.</li> </ul>
Pitch length (from stumps at batter end)	22m	
Bowler run-up length (taken from popping crease)	20m-30m	<ul> <li>Bowler run-up areas should include 10mm cushioning underlay; 10mm rubber roll or equivalent for cushioning direct glue fixed to rebated concrete slab. This 'shock pad' should be located in the run-up areas and 3 metres past the popping crease to reduce impact injuries in athletes.</li> <li>A slightly longer pile synthetic grass may be used on the bowler run-up areas, however try to avoid any 'step-like' changes to surface types/levels for bowlers.</li> </ul>
Synthetic pitch surrounds (gap between pitch and width of lane)	300mm (either side)	<ul> <li>A slightly longer pile synthetic grass may be used on these areas, however try to avoid any 'step-like' changes to minimise ball deviation.</li> </ul>

Netting/fencing length (from back netting/fencing to stumps at bowler end)	21.12–22.12m (minimum) 25m (recommended)	<ul> <li>The length of dividing netting will be dependent on the 'buffer distance' behind the batter (see below), however should in all cases extend at a minimum to the stumps at the bowler end (21.12m-22.12m).</li> <li>Extending the length to 25m will further mitigate the risk of injury resulting from balls ricocheting from adjacent lanes and potentially tripping bowler's during their run-up.</li> </ul>
Loft drive netting	Optional	<ul> <li>2m passed the popping crease</li> <li>Height to underside of net — 4m minimum</li> </ul>
Sight Screen (batter end)	3.1m minimum (height)	■ If installing a sight screen at the batter's end (to assist the bowler's ability to see a ball struck back in their direction, particularly during power hitting training activities), consider safely erecting/fastening a temporary sight screen. This will enable greater flexibility and clear visibility (if removed) for a coach wishing to stand behind the training lane to conduct batter/bowler performance or technique assessments.
Sight Screen (Bowler end)	3.1m minimum (height)	
Total width of a multi-lane facility (training lanes and circulation space/safety margin only).	18.4m (4 lanes) 25.6m (6 lanes) 32.8 (8 lanes)	<ul> <li>A minimum 4 lane facility is recommended, however 6–8 lanes should be considered if the facility is servicing a wider community/ high usage levels.</li> <li>The adjacent measurements relate to the width of the training lanes and circulation space/safety margin only. Measurements do not include a spatial allowance for other amenities (e.g. toilets, storage, kit bag lay down).</li> </ul>
Total length of training facility (training lanes and circulation space/safety margin only)	41.9m — 52.9m	<ul> <li>The total length of the training facility will depend on the buffer distance at the rear of the net (1m or 2m) and the bowler run-up length (20m or 30m).</li> <li>The adjacent measurements relate to the width of the training lanes and circulation space/safety margin only. Measurements do not include a spatial allowance for other amenities (e.g. toilets, storage, kit bag lay down).</li> </ul>



When planning indoor training facilities, consider design requirements that cater for 'Indoor Cricket' (Refer to Guidance Note 05: Indoor Cricket for design guidance) to enable greater flexibility of use and programming opportunities.



# Netting

The structure of the net system nets, screening, tracking and fittings should be able to withstand cricket balls hitting the net and supporting structures when subjected to normal use. Balls should not pass under, over, through or between the nets or screening.

Horizontal nets should be attached to vertical nets and balls should not pass between them. Balls should not become entrapped in the net system during normal use. The netting should withstand balls impacting it and players running into it.

The individual net bay is separated from the adjoining bays by tracked side netting extended from end to end. The most efficient method is independent overhead tracks, which allows nets to be drawn independently and allows for flexible usage.

It is recommended that nets be suspended from a heavy-duty aluminium tracking and trolley system. This type of system requires an independent overhead net below which the tracking system is fixed to. There should be no space between the roof netting and the tracking system through which a ball can pass into adjacent nets.

The side netting should be long enough for at least 0.3m and no more than 0.5m of slack/drape to rest on the floor. This creates added weight and prevents the net from billowing out when struck by the ball (a billow of no more than 1.3 metres should be achieved when in service) otherwise it will interfere with activities in adjacent nets and walkways forming a potential trip or safety hazard.

Retractable netting allows for more flexible use of the netted enclosure and increases programming opportunities.



An additional "zipped" access point(s) may be included to allow the net to be opened from ground level. This will accommodate users that cannot enter/exit the netted area via the traditional split net system.

#### Material

It is recommended that white polymer netting be used for the roof netting, and it be either sewn or roof fitted with, 50 mm knot (knot to knot) or 40 mm knotless (weld to weld) square mesh, with the leading edges taped for reinforcement.



Image courtesy of Cricket Victoria

# **Supporting infrastructure**

# Sight screen

#### Batter's end

Sight screens should be fitted to all indoor training nets. They should be suspended on lanyard cords threaded through the net and not fixed to the net as this will create sagging. Screens should be located at the batter's end on both sides and rear of each lane.

It is recommended that the sight screen be at least 3.1m in height.



If installing a sight screen at the batter's end (to assist the bowler's ability to see a ball struck back in their direction, particularly during power hitting training activities), consider threading through a temporary/removable material. This will enable greater flexibility and clear visibility (if removed) for a coach wishing to stand behind the training lane to conduct batter/bowler performance or technique assessments. It also enables the colour of the sight screen/material to be changed pending the colour of cricket ball being used.

#### Bowler's end

Heavy duty canvas and polymer materials are generally used for indoor sight screens. Sight screens should be designed with brass eyelets on each corner, and reinforced edging to ensure the sight screen can be fixed to the netting securely. The ability to interchange the colour of the sight screen will provide greater flexibility (e.g. black for a white/pink ball and white for a red/pink ball). Similar to the batter's end, it is recommended the sight screen be at least 3.1m in height

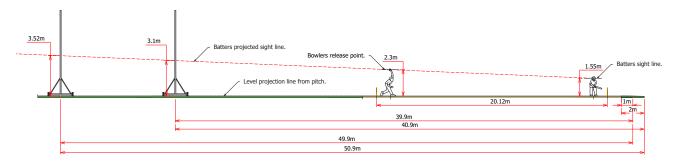




Image courtesy of Cricket Victoria

# Power for bowling machines

Storage boxes are required to store the power supply for bowling machines. It is recommended that storage boxes are installed in ground. The location of the storage boxes should be easily accessible to all bowling machines and fit for purpose.





Images courtesy of Cricket Victoria

# Lighting

The following table provides the required lighting levels over the whole training net area (measured at pitch level):

CRICKET TRAINING INDOORS		
AS 2560.2 CLASS	Level of competition (M=Male; F=Female)	Average horizontal maintained illuminance
I	<ul><li>International (M)</li><li>Domestic (M)</li></ul>	1500
II	<ul><li>International (F)</li><li>Domestic (F)</li></ul>	1000
III	<ul> <li>Premier Senior — 1st &amp; 2nd XI (M)</li> <li>National Youth Championships (U/19 M)</li> </ul>	750
IV	<ul> <li>Premier Senior (F)</li> <li>Premier Senior — All other (M)</li> <li>National Youth Championships (U/ 19 F)</li> <li>National Youth Championships (U/ 17 M)</li> <li>National Youth Championships (U/ 16 F)</li> <li>Community Senior (M)</li> <li>Premier Junior (M&amp;F)</li> <li>Junior Cricket Stage 3 (M)</li> </ul>	500
V	<ul> <li>Community Senior (F)</li> <li>Junior Cricket Stages 1, 2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> <li>Cricket Blast (M&amp;F)</li> <li>Schools Programs (M&amp;F)</li> </ul>	300

Note: Lighting levels provided are based on use of a standard white ball, however are also considered appropriate for a pink ball.



The ability to program/adjust lighting levels of indoor training facilities relative to the level of training/use is a key design feature that should be considered early in the project planning phase.

Detailed recommendations and requirements for lighting of indoor cricket training environments is further addressed in Guidance Note 06: Floodlighting.

# GUIDANGE MOTE OS INDOOR CRICKET

# Introduction

Indoor cricket facilities are distinctly different to indoor training facilities. Indoor cricket facilities cater for the competition format of indoor cricket, but can also provide flexibility to accommodate training, multi-sport programs and other community/commercial activities.

This Guidance Note provides information and recommendations regarding the following aspects related to indoor cricket facilities:

- Venue attributes
- Venue design considerations
- Field of play specifications

Throughout this Guidance Note, design and planning tips and references to ESD considerations and maintenance recommendations are also provided.

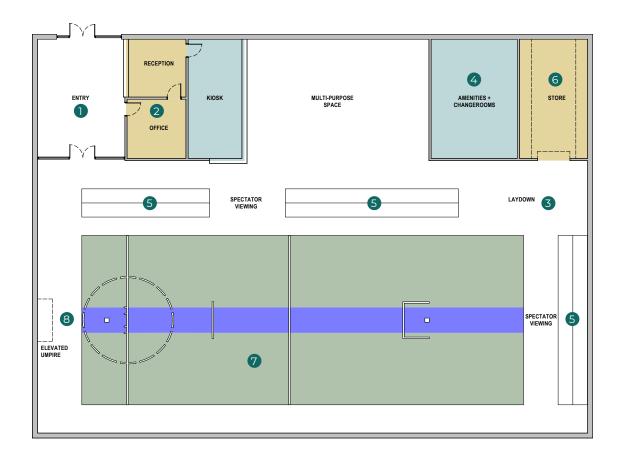


# Venue attributes

The following table and associated venue layout plan provides a guide to the typical venue attributes that should be included within a dedicated indoor cricket facility.

AREA / ATTRIBUTE	DESCRIPTION	TIPS
ENTRY / RECEPTION / KIOSK	Creating a welcoming environment to any community facility starts with providing a positive first impression to patrons on entry.  This includes reception areas that are open and configured to manage flow into the building, as well as welcoming social and spectating areas that provide visibility into the centre and across playing areas.  Ensuring that adequate spectator areas are provided throughout the venue and within any social, bar or kiosk area will add to the overall spectator experience. The provision of heating, cooling, natural light and ample circulation	<ul> <li>Ensure the entry area does not also act as the venue "kit laydown area" and alternate space is provided.</li> <li>The design of any building for indoor cricket must be carefully considered in order to create both strong playing and venue amenity areas. Designing areas that minimise staffing requirements and co-locate reception, food, beverage and merchandise sales areas will assist to create management and financial efficiencies.</li> </ul>
OFFICE 2	space will also assist in improving player and spectator comfort.  A venue management office is recommended to support venue operations. The size and components of the office should be determined through a facility scoping exercise.	<ul> <li>Typically the office should be fitted out with desk and cabinetry to support the number of users and be cabled with relevant digital technology.</li> <li>A connection from the office area to reception desk will assist in minimising staffing numbers where multiple functions can be accommodated.</li> </ul>
KIT BAG LAYDOWN  3	Typically indoor cricket facilities will have multiple teams waiting to use the courts while the active teams conduct their game. The overlap of teams and users creates a need for a dedicated laydown area for kit bags outside the competition courts (netted area). This laydown area should not impact on required circulation spaces or building egress. The area required for the kit bag laydown is dependent on the number of courts available for concurrent games at the facility.	<ul> <li>A typical senior kit bag will require Isqm of space, which is inclusive of circulation. If there are three games running concurrently, there may be up to six teams at the venue.</li> <li>Consideration may be given to the provision of shelving or "pigeon holes" capable of storing kit bags. Pending available space and circulation requirements, shelving can be positioned around the extremities of the building or provide a divider within the laydown area. Shelving allows for a more efficient stacking of kit bags (potentially two to three bags high), however should not exceed 1200mm in height.</li> </ul>

AMENITIES  4	The indoor cricket facility will need to provide its own amenities for players, spectators, umpires and venue staff. The number of toilets and showers will be dependent on the size of the facility and the maximum number of people the indoor cricket centre can cater for.  Amenities should be easily accessible from the netted court area and provide private, lockable toilet and changeroom spaces to accommodate all users.  Wherever toilet and shower facilities provide for all genders and all abilities.	<ul> <li>Consider principles of universal access and all gender provision when designing toilets and showers</li> <li>Ensure accessible amenities are provided pursuant to the NCC.</li> <li>Ensure sanitary bins are provided in toilet amenities.</li> </ul>
SPECTATOR VIEWING	Both player and spectator viewing seating is to be provided within the venue, with this to be located either parallel to the court(s) or behind the bowler's end of the court.  Seating can be a single level or tiered seating. Both single level and tiered seating need to include adequate provision for spectators who require the use of mobility aids (e.g. wheelchairs, walkers).	Consider opportunities for both floor level and elevated viewing where practical.
STORAGE  6	Internal storage rooms should be designed with shelves to maximize storage room capacity. Storerooms should be located internally within the facility. They should be outside the netted court area but have easy access to the competition space.  The store size should be sized appropriately for the facility's operating needs and may include multiple areas. Overall, between 30sqm and 40sqm of storage is required to support indoor cricket use. Additional storage space may be required to accommodate other sporting or activity uses (e.g. netball posts, soccer goals, soft matting, inflatable devices).	<ul> <li>Storage rooms should have a lockable roller shutter and be lined with durable materials such as plywood or fibre cement sheet to provide increased durability.</li> <li>Providing adequate space and access for wheeled equipment such as trolleys and equipment bags should also be considered.</li> </ul>
INDOOR NET AREA	Refer to field of play specifications below.	
UMPIRE AREA	An elevated umpire platform should be positioned outside of the circulation space (1500mm) at the rear of the netting at the batter's end of the court.	





Example of elevated umpire platform

# Venue design considerations

#### Clearances and circulation

Clearances around the netting is critical for circulation and safety of both players and spectators. Allow for a minimum 2000mm wide circulation space along the sides of the court to any fixed object or infrastructure. This will allow for two people to pass each other outside of the netting/court as well as a sufficient buffer distance for players to a fixed object or infrastructure (if diving or falling into the netting).

Allow for a 1500mm circulation space at the rear of the nets to any fixed object or infrastructure (e.g. umpire platform).

Maintaining an adequate clearance space between the roof netting, building structure and services (e.g. lighting, fans/air conditioning, fire services) is an important design consideration and should be determined via a site specific assessment and approved by a building certifier.



The clearance space between roof netting and the above building structure and services should take into account the potential spring of netting.

# Natural daylight and ventilation

Natural daylight is preferred wherever possible. Skylights or polycarbonate roofing can be a great way to introduce daylight to an indoor space. Ensure selected products filter / diffuse the light so that direct sunlight does not cause glare issues for players.

Windows at high level can also provide good access to natural daylight. High level windows are preferred to low level windows due to the improved security they offer and better depth of light penetration into the building. Windows should be positioned or appropriately shaded so that glare does not impact players.

Air-conditioning of indoor cricket training facilities can be cost prohibitive. Therefore, natural ventilation must be considered as part of the design response. Architects should review the direction of prevailing winds to determine the optimal placement of windows or fixed louver openings. Windows can be supplemented by air extraction fans or ceiling fans to enhance the natural ventilation of the space by providing additional air circulation.

#### Material and colour selection

The selection of colours in the building space needs to be carefully considered to work with the net and ball colours. This is particularly important behind the batter and the bowler to promote visibility of the yellow ball.

Materials selection should prioritise durability. Plasterboards should be avoided and more durable materials such as plywood, fiber cement sheet, blockwork or masonry are preferred. This is particularly important where there is a risk of balls hitting the linings or in high traffic / high use areas such as the kit bag laydown area.

# Signage and occupant safety

Signage plays an important role in promoting occupant safety in indoor cricket facilities. Signs can indicate where players should wear protective gear, where spectators should stand, and where equipment should be stored. This helps to prevent accidents and injuries that could occur. In addition to the general building wayfinding and statutory signage, additional types of signage to be considered include:

- Identifying high risk areas / no standing zones
- Identifying spectator viewing points
- Location of First-aid kits or First-aid rooms

Signage should be clear and legible, and located in easy-to-read, logical positions.

#### Acoustics

Acoustics is an important consideration, especially within spaces that have adjacent uses or share common walls with neighbouring properties. The design should include sound-absorbing materials to minimise noise, vibration and echo.

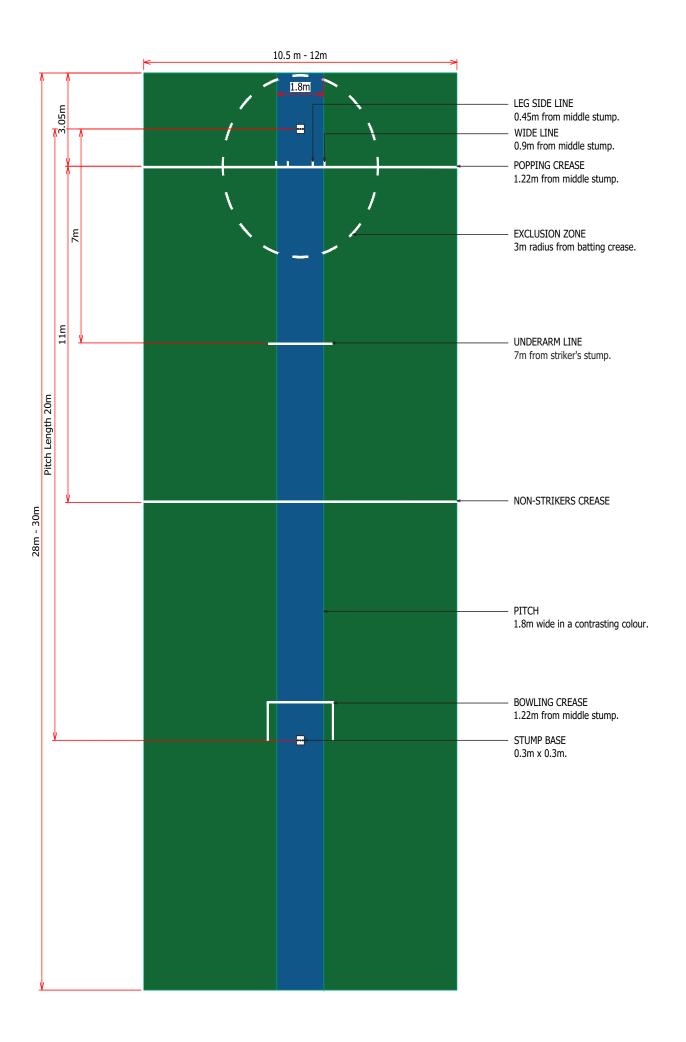
# Car parking

The adequacy of car parking, in the context of site specific conditions and surrounding uses should be considered during design and development stages. Shared precinct car parking can be an option based on the prime usage times of an indoor cricket venue (usually weeknights and weekends). The relevant local government or planning authority should be able to advise on minimum requirements (e.g. provision of designated accessible parking spaces).

# Field of play specifications

The following specifications and dimensions should be considered when designing or refurbishing an indoor cricket facility. The diagram on the following page provides a visual image of dimensions, layout and requirements for indoor cricket courts.

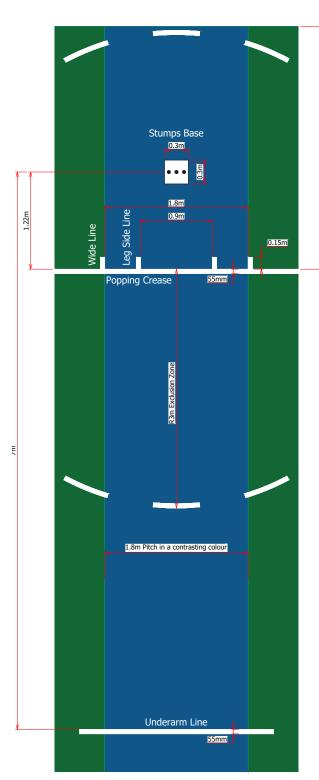
FIELD OF PLAY ELEMENT	SPECIFICATIONS
LENGTH OF COURT	28m (minimum) to 30m (maximum)
WIDTH OF COURT	10.5m (minimum) to 12m (maximum)
HEIGHT OF ROOF NETTING	4m (minimum) to 4.5m (maximum)
RUN-OFF / CLEARANCE (REAR OF NETTING)	1.5m (minimum) from structure
RUN-OFF / CLEARANCE (SIDE OF NETTING)	2m (minimum) from structure
THE CRICKET PITCH	The cricket pitch is 20m long and 1.8m wide, covered with artificial turf, with the striker's end close to one end of the court. An additional line is marked across the middle of the pitch, 11m from the striker's popping crease, and forms the non-striker's crease, behind which they are safe from being run out. The batters run only 11m to score runs instead of the full length of the pitch.
THE WICKETS	The wickets are 22.86cm wide, 71.1cm high and consist of three stumps with two bails 11.1cm long on top. Bails may be wooden or plastic and must be tied to the stumps. The wickets are located at each end of the pitch 20m apart.
THE WICKET LINE	Should be marked in line with the stumps at each end and be 1.83m in width at the batting end and 2.47m at the bowling end. The stumps should be placed in the centre and the middle of the stumps 20m apart.
THE POPPING CREASE	Should be in front of and parallel with the wicket lines at both ends. Its back edge should be 1.22m from the centre of the stumps. At the striker's end the popping crease should extend from one side of the court to the other and is called the batting crease. At the bowler's end the popping crease will be the line extending between the return crease and is called the bowler's crease or the front foot line.
THE RETURN CREASE	At the bowler's end will be the lines at right angles to the bowling crease and the line of the wickets. The return creases will be marked 1.22m from the middle stump on the line of the wicket. The return creases may be considered to extend back from the line of the stumps indefinitely for the purposes of adjudication.
THE RUNNING CREASE	The running crease (or non-striking batter's crease), which is the edge of the crease marking nearest the bowling end, should be parallel to the popping crease and extend from one side of the court to the other. The distance between the running crease and batting crease should be 11m.
THE LEGSIDE LINES	Should be positioned with the inside edge 45cm from the middle stump. The legside lines should extend a minimum 15cm at right angles to the batting crease. The offside or wide lines are to be positioned with the inside edge 90cms from the centre stump.
THE FIELDING EXCLUSION ZONE	Should be marked in an arc extending from the centre of the batting crease at a radius of 3m.
THE UNDERARM LINE	Should be marked across the pitch 7m from the striker's stumps.
LINE MARKING	Should be marked at a thickness of 55mm.



#### Netting

The net enclosing an indoor cricket court is to be very tightly tensioned. This allows consistency in the ball's bounce off the net. It is also a safety feature — players are protected from hitting any walls or columns that may be close to the court and there is less chance of getting fingers caught in tight nets. It also allows spectators to be closer to the game, as players hitting the net will not stretch it far.

The indoor court is defined by a cubic frame of high-strength steel cable, to which the netting is securely attached. Tensioning of the net is achieved by tensioning of this 'cube'. The lower four cables of the cube are secured directly into a concrete floor. The four lower corners are tensioned to anchor points set into the concrete.



The top four cables are all fastened at the corners to anchor points, located on the ceiling/inner roof structure. These take the main tension and help form the 'box' structure of the cables. These top cables are then further fastened to the ceiling for additional support. The shape of the box thus formed is achieved by adjusting the tension mainly in the eight corners, with finer tuning possible by individually adjusting the extra attachments along the top edges.

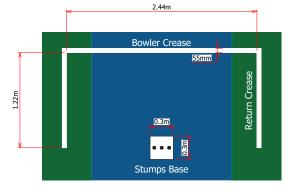
**Fixed netting system:** For fixed netting system, the nets are often hung on an aluminium trackway and fixed to the ceiling. The nets then drop down 8m to 4m to provide a substantial enclosure for the game.

#### Retractable netting system:

Retractable netting allows for more flexible use of a multi-purpose enclosure and increased sport and recreation programming opportunities.



An additional "zipped" access point(s) may be included to allow the net to be opened from ground level. This will accommodate users that cannot enter/exit the netted area via the traditional split net system.



# Lighting

It is essential to have good quality lighting so that the players can follow the movement of the ball travelling at high speeds, either struck by the batter or bowled by the bowler.

The illuminance must be uniform throughout the playing area, with the background walls behind both batter and bowler providing a good viewing contrast. Safety is paramount and the lighting system must take into account the propulsion of balls at speed.

The recommended minimum lighting level for indoor cricket is between 300 lux and 1000 lux for non-televised use as outlined in the below table:

INDOOR CRICKET		
AS 2560.2 CLASS	Level of competition (M=Male; F=Female)	Average horizontal maintained illuminance
I	<ul><li>International Series (M)</li><li>National Championships (M)</li></ul>	1000
II	<ul> <li>International Series (F)</li> <li>National Championships (F)</li> <li>National Indoor Cricket League (M&amp;F)</li> <li>Premier – Inter Centre Competition (M&amp;F)</li> </ul>	750
III	<ul><li>National Junior Championships (M&amp;F)</li><li>In Centre Competition (M)</li></ul>	500
IV	<ul> <li>In Centre Competition (F)</li> <li>Junior Competition (M&amp;F)</li> <li>School Sports (M&amp;F)</li> <li>Entry Level Programming (M&amp;F)</li> </ul>	300

Note: Lighting levels provided are based on use of a standard yellow indoor cricket ball.

Detailed recommendations and requirements for lighting of indoor cricket training environments is further addressed in Guidance Note 06: Floodlighting.



For indoor lighting projects, be mindful of specific local factors. Ceiling types, fire walls and distance from switchboards will impact on the design. In a refit, the ability to access ceiling space and the condition of the existing electrical wiring and switchboard will need to be considered.

# GUIDANGE MOTE OG

# FLOODLIGHTING

# Introduction

The way cricket is being played and consumed continues to evolve. The rise of short-form cricket (in particular T20 competitions) and the emergence of new modified programs and activities means cricket is now being played by more participants, more frequently, at more venues (including indoors) and by a wider, more diverse playing group than ever before. Floodlighting for cricket venues is emerging as one growing infrastructure need and provides an opportunity to support more flexible scheduling of programs and activities.

The term 'Lighting up Cricket' features heavily in several state infrastructure strategies, particularly those states located in the country's north, where no daylight savings and/ or climatic conditions mean playing and training in the evening under lights is often the more preferable, or in some instances, the only opportunity for cricket to be played.

In land-locked municipalities, where access to unoccupied open green space is challenging, facility owners and managers are looking for innovative ways to increase the carrying capacity of their existing venues. Floodlighting of sports fields and training facilities provides one solution to increase programming beyond standard daylight hours.

This Guidance Note provides information relating to the following floodlighting applications and should be read in conjunction with AS 2560.1 and AS 2560.2:

- Outdoor cricket competition and ball fielding skills
- Cricket training outdoors (outdoor practice pitches and nets)
- Cricket training indoors (indoor practice pitches and nets)
- Indoor cricket competition and training.



AS 2560.2 is a non-mandatory, best practice and industry adopted standard. It does not include the special lighting requirements for television broadcasting.

It is recommended this Guidance Note be used during the initial scoping phase of a cricket lighting project to ensure:

- Appropriate lighting levels are provided, relevant to the level of competition or training, and
- Consideration has been given to recommended lighting design and construction tips.



Please refer to Appendices section for examples of varying competition levels/content and associated lighting levels.

# **Recommended lighting levels**

The following tables outline the recommended minimum lighting levels for nonbroadcast indoor and outdoor cricket competition and training activities.



Recommended lighting levels in AS 2560.2 do not guarantee player/umpire/ coach/spectator safety during cricket competition and training activities. Moreover, it is not a mandatory requirement that cricket lighting projects completed prior to the standard's introduction meet AS 2560.2 provided they aligned with the recommended level of lighting at the time of installation. However, testing undertaken by Cricket Australia has informed what is considered to be both a safe and suitable level of lighting, and it is strongly recommended providers seek to increase their lighting levels to meet the recommended minimum standards prescribed in the standard.

OUTDOOR CRICKET		Average horizontal maintained illuminance				
AS 2560.2 CLASS	Level of competition (M=Male; F=Female)	Square	Infield	Outfield	Practice* on-field	Physical exercise**
I	<ul><li>International (M)</li><li>Domestic (M)</li></ul>	1500	1500	1000	750	
II	■ Match Simulation — National/State (M)	1000	850	700	500	
III	<ul> <li>International (F)</li> <li>Domestic (F)</li> <li>Premier Senior — 1st and 2nd XI (M)</li> <li>National Youth Championships (U/19 M)</li> </ul>	750	600	500	400	
IV	<ul> <li>Premier Senior 1st XI (F)</li> <li>Premier Senior — All other (M)</li> <li>National Youth Championships (U/19 F)</li> </ul>	500	400	300	300	
V	<ul> <li>Premier Senior — All other (F)</li> <li>Community Senior (M)</li> <li>National Youth Championships (U/17 M)</li> <li>Premier Junior (M&amp;F)</li> <li>Junior Cricket Stage 3 (M)</li> </ul>	300	250	200	150	50
VI	<ul> <li>Community Senior (F)</li> <li>National Youth Championships (U/16 F)</li> <li>Junior Cricket Stages 2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> </ul>	200	200	200	100	
VII	<ul><li>Junior Cricket Stage 1 (F)</li><li>Cricket Blast (M&amp;F)</li><li>Schools Programs (M&amp;F)</li></ul>	100	100	100	75	

- Lighting levels relate to non-broadcast outdoor cricket competition.
- Lighting levels provided are based on use of a standard white ball, however are also considered appropriate for a pink ball.
- The use of sight screens that contrast with the ball colour is important to enable quick and clear visual identification.

<sup>\*</sup> Non-competitive throwing and fielding (catching, ground balls)

<sup>\*\*</sup> Non-ball activities

CRICKE	CRICKET TRAINING OUTDOORS			
AS 2560.2 CLASS	Level of competition (M=Male; F=Female)	Average horizontal maintained illuminance		
I	<ul><li>International (M)</li><li>Domestic (M)</li></ul>	1000		
II	<ul> <li>International (F)</li> <li>Domestic (F)</li> <li>Premier Senior — 1st &amp; 2nd XI (M)</li> <li>National Youth Championships (U/19 M)</li> </ul>	750		
III	<ul> <li>Premier Senior — 1st XI (F)</li> <li>Premier Senior — All other (M)</li> <li>National Youth Championships (U/19 F)</li> </ul>	500		
IV	<ul> <li>Premier Senior — All other (F)</li> <li>Community Senior (M)</li> <li>National Youth Championships (U/17 M)</li> <li>Premier Junior (M&amp;F)</li> <li>Junior Cricket Stage 3 (M)</li> </ul>	300		
V	<ul> <li>Community Senior (F)</li> <li>National Youth Championships (U/16 F)</li> <li>Junior Cricket Stages 2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> </ul>	200		
VI	<ul><li>Junior Cricket Stage 1 (F)</li><li>Cricket Blast (M&amp;F)</li><li>Schools Programs (M&amp;F)</li></ul>	100		

**Note:** Lighting levels provided are based on use at a standard white ball, however are also considered appropriate tor a pink ball.

CRICKET TRAINING INDOORS		
AS 2560.2 CLASS	Level of competition (M=Male; F=Female)	Average horizontal maintained illuminance
I	<ul><li>International (M)</li><li>Domestic (M)</li></ul>	1500
II	<ul><li>International (F)</li><li>Domestic (F)</li></ul>	1000
III	<ul> <li>Premier Senior — 1st &amp; 2nd XI (M)</li> <li>National Youth Championships (U/19 M)</li> </ul>	750
IV	<ul> <li>Premier Senior (F)</li> <li>Premier Senior — All other (M)</li> <li>National Youth Championships (U/19 F)</li> <li>National Youth Championships (U/17 M)</li> <li>National Youth Championships (U/16 F)</li> <li>Community Senior (M)</li> <li>Premier Junior (M&amp;F)</li> <li>Junior Cricket Stage 3 (M)</li> </ul>	500
V	<ul> <li>Community Senior (F)</li> <li>Junior Cricket Stages 1,2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> <li>Cricket Blast (M&amp;F)</li> <li>Schools Programs (M&amp;F)</li> </ul>	300

**Note:** Lighting levels provided are based on use of a standard white ball, however are also considered appropriate for a pink ball.

INDOOR	INDOOR CRICKET		
AS 2560.2 CLASS	Level of competition (M=Male; F=Female)	Average horizontal maintained illuminance	
I	<ul><li>International Series (M)</li><li>National Championships (M)</li></ul>	1000	
II	<ul> <li>International Series (F)</li> <li>National Champtionships (F)</li> <li>National Indoor Cricket Loague (M&amp;F)</li> <li>Premier — Inter Centre Competition (M&amp;F)</li> </ul>	750	
III	<ul><li>National Junior Championships (M&amp;F)</li><li>In Centre Competition (M)</li></ul>	500	
IV	<ul> <li>In Centre Compotiton (F)</li> <li>Junior Competition (M&amp;F)</li> <li>School Sports (M&amp;F)</li> <li>Entry Level Programming (M&amp;F)</li> </ul>	300	

Note: Lighting levels provided are based on use of a standard yellow indoor cricket ball.



#### **FLOODLIGHTING TIPS**

- Where training facilities are being used for warming up for a game held at a ground with higher illuminance levels, e.g. for TV broadcast, then a higher level should be considered to acclimatise the batter.
- Where the practice pitch is used for high-performance training and highspeed video is employed, higher illuminances may be appropriate together with additional vertical illuminance analysis. A qualified lighting designer should be consulted.
- Light loss from nets can be expected; actual losses will depend on the net transmittance factor. When measuring, values can be expected to be lower due to the attenuation of nets.
- It is important to utilise a suitable visual background/wall against which the player and the ball are contrasted to enable quick and clear visual identification.
- When installing lighting indoors, ensure there is adequate distance between the roof netting and the lighting, taking into account the 'spring' of the netting.

## Planning and design considerations

The following processes, tips and considerations are provided to assist in new floodlighting installations for cricket. The 'Project Planning and Delivery Stages' and related steps outlined in Section 2 should also be adopted.

#### Design process

All cricket lighting should be designed by a qualified lighting and electrical engineer. A structural engineer will also need to be engaged to assist with the footing design.

Some detailed information is required before the engineer can proceed with their design works. They will generally require the following for a new outdoor installation:

- A feature survey and/or civil detailed design drawings to overlay the lighting design on. This will ensure you achieve the most accurate design outcomes.
- Information regarding the existing site including the power installation.

Consider and consult with likely co-tenant sporting codes (all codes of football) with a view to reducing/sharing infrastructure costs, mutual lighting compliance and other shared efficiencies.



If a co-tenant sporting code (e.g. football) is leading a lighting upgrade at a highly utilised site by cricket, encourage the lighting design and related lighting levels to meet the requirements of both sports, or, at a minimum, seek to have the design future proofed to enable an increase in lighting level(s) at a later stage.



When developing a new lighting design, consider the location of any trees around the perimeter of the playing field to minimise the need for tree removal.

#### Average horizontal maintained illuminance

The illuminance values in the tables above are what is termed average horizontal maintained illuminance, being the value below at which the average illuminance level on the field of play is not allowed to fall.

For new projects, the average illuminance will need to be higher than the maintained value considering light loss over time due to the environment and scheduled maintenance periods.

It is recommended the lighting design use and justify a depreciation factor, known as 'Light Loss Factor', accounting for luminaire lumen depreciation and luminaire dirt depreciation applicable to the site.

It is recommended lighting testing be conducted at the beginning of each season to ensure the average horizontal maintained illuminance remains in line with recommended lighting levels.

Being exposed to the elements, it is common for lamps or luminaires on floodlights to accumulate dirt/dust or be subject to movement as a result of high winds.

Uncleaned and/or misdirected lighting can significantly impact on average horizontal maintained illuminance levels.

#### Pole configuration and heights

In an outdoor situation, the lighting towers should ideally be located so that they do not line up with the cricket pitch.

The height of the poles is determined by the size of the playing field. Under the standard, Class I and II venues require poles with a minimum height of 40 metres, while poles at Class III-VII venues should be 30 metres in height.

#### Player glare

Glare can occur when the placement of the lamp is in the line of sight of the ball in player's main view directions. The positioning and height of the light towers will affect the amount of glare present.

A maximum glare rating  $GR_{max}$  = 50 is permitted.

#### Obtrusive light

All external lighting designs are required to meet the requirements of AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.

Conformance to this standard shall be demonstrated by the results of calculations and analysis of design methods with respect to the standard. This should be provided with the lighting design and is normally a requirement for the granting of a development or building permit.

The standard sets illuminance and intensity limits in environmentally relevant vertical planes depending on ambient lighting conditions. It also sets limits for limiting glare to transport systems/road users and upward waste light directed into the night sky.

The design should conform to the environmental zone which varies as to the usage and location of the space. For example: suburban areas in towns and cities are rated as category A3 with equates to 10 lux vertical illuminance and maximum luminous intensity per luminaire of 12500 cd at windows.

#### Civil and structural works

The foundation design of the same pole and floodlight system may differ between sites due to differing soil conditions.

The number and type of light fittings per tower (wind sail area and weight), the site's wind rating and the site's soil type can affect the depth and outside diameter of the concrete footing required.

The Geotechnical report should be taken at the pole positions and be at a depth of 6m.

### **Building permit**

Pending the height of new lighting poles or structures, it is recommended you consult with your relevant Building Authority to confirm if a building permit is required.

#### Lighting in the vicinity of an airport

If your venue is within a 6km radius of an airport, the relevant authority should be contacted to determine whether any particular restrictions apply.



Whether it be a new installation, or an upgrade to existing lighting, obtaining a hand over manual at the end of the works that outlines the practical completion date, relevant contractor /lighting consultant contact details, warranty period, maintenance history and ongoing servicing requirements is strongly encouraged.

# **LED lighting**

Many floodlighting installations are being upgraded to LED for the additional benefits they can provide a venue or field of play.

Replacing an installation with LED luminaires is desired due to the advantages of:

- Instant operation.
- Energy savings, in the order of 50%.
- Low maintenance: regular lamp replacement not required (note that if the LED(s) fail, a replacement of the whole luminaire may be required).
- Ability to provide improved lighting control allowing excellent lighting uniformity and less spill to neighbouring properties.
- Option to dim (Note: not all luminaires can be dimmed. This will depend on the driver technology choice).

Indoor installations, whether metal halide or fluorescent installations can be replaced with LED alternatives usually in the same position taking advantage of the existing wiring.

A one for one replacement of pole mounted metal halide luminaires can provide higher levels of illuminance with lower energy use. It is important to choose luminaires with low windage so as to not overload the pole. If there is building permit information of the installation, the designer will be able to calculate the maximum number of floodlights of a certain type that can be installed.

An upgrade to an existing installation should meet all the factors of a new installation.



If upgrading an existing lighting installation, being able to provide a copy of the 'as-built' drawings to your electrical lighting engineer will assist with the design process.

If you are looking to retain existing light poles as part of a metal halide to LED lighting transition, consult with an electrical and/or structural engineer first to certify pole suitability.

#### **ESD** considerations

- LED lighting is the most energy-efficient lighting technology. It also has the longest lifespan, minimising waste generation via less frequent replacement of luminaires.
- The ability to 'dim' lighting illuminance to required levels (e.g. varying levels of competition/training) or program them to switch on/off at certain times will minimise energy wastage (and provide cost savings).
- Ensuring the lighting design is as targeted as possible (e.g. onto the field of play) will minimise light spill and energy wastage.
- Consideration should be given to minimising the impact(s) sports field floodlighting may have on local wildlife (e.g. birds and insects).
- Regular inspection and maintenance of light poles and luminaires should support quality performance and longevity of this infrastructure.



Image courtesy of Apex Lighting

# GUIDANGE MOTE 07

# PAVILIONS AND CHANGE FACILITIES

#### Introduction

Pavilions play a crucial role for cricket clubs to operate and meaningfully engage with users and the community. They need to be functional spaces that are welcoming and inclusive for all people.

Well-designed community spaces and change rooms can contribute significantly to a successful club, sporting precinct and local community. They can be flexible spaces with offerings for multiple user groups, while celebrating the club history and performance.

This Guidance Note provides information on planning and design of pavilions and community spaces and covers the following topics:

- Design principles
- Universal access
- Environmental Sustainable Design (ESD)
- Design for longevity and disaster
- Master plan location and placement of the pavilion and supportive infrastructure
- Main pavilion, community spaces, amenities, storage and change room areas.

Reference is made within this Guidance Note to preferred area schedules for community spaces, change rooms and building amenities. It should be read in conjunction with other relevant sporting code facility design guidelines when planning a new building or redeveloping an existing facility in order to align with other users and maximise opportunities for investment.

It is important to note that any pavilion or building project should be based on a sound foundation of club, community and council consultation and the project planning processes and principles outlined within Section 2 of the Guidelines.

Informed business and management planning should precede design processes to ensure that pavilion areas and spaces adequately reflect needs (cricket and community) and are large and functional enough to ensure that clubs, users and the venue itself are viable and sustainable.

# **Design principles**

In addition to cricket specific facility guidelines detailed in this document, it is important that relevant Standards, Codes, Acts and Regulations are complied with and fully considered during the planning and design of cricket pavilions, clubrooms and associated buildings:

- The Environment Protection and Biodiversity Conservation Act (1999); and the requirements of State and Territory Departments and Authorities responsible for planning and environmental matters.
- Work Health and Safety Acts (2011) (WHS).
- The Building Code of Australia: National Construction Code (NCC).
- Australian Standards (using the version applicable).
- The National Standard for Construction Work document, National Occupational Health and Safety Commission NOHSC:1016.
- The Protective Security Policy Framework (PSPF) document promulgated by the Australian Government Security Construction and Equipment Committee (SCEC).
- The Human Rights and Equal Opportunity Commission (HREOC) advisory notes.
- National Code of Practice for the Construction Industry and the Australian Government Implementation Guidelines for the Code.

In addition, all designs (new and refurbished facilities) must fully comply with the Disability Discrimination Act (DDA) and relevant Australian Standards, which include, but are not limited to the following:

- Disability Discrimination Act (1992).
- Disability (Access to Premises Buildings) Standards 2010.
- AS 1428.1 Parts 1, 2, & 4 Design for access and mobility.

#### Universal access

Universal design relates to the design of buildings, products or environments to make them accessible to most people, regardless of age, disability, background or any other factors. Universal design can be applied to all fields of design, including product design, interactive design, architecture and urban planning.

For Cricket Australia, universal design means adapting and designing spaces that are functional for the full range of diversity within our communities, that address the physical, cultural, sensory and cognitive needs of the broadest possible range of people. This is applied through the following guiding principles:

CONSIDERATION	DESCRIPTION	TIPS
EQUITABLE USE	The pavilion is useful and marketable to people with diverse abilities.	<ul> <li>Ensure the main entry is fully accessible in approach and operation.</li> </ul>
	with diverse abilities.	<ul> <li>Locate ambulant and disabled toilets near able bodied toilets.</li> </ul>
		<ul> <li>Do not require people with disabilities to make excessive journeys not requested of people without disabilities.</li> </ul>
		<ul> <li>Locate team members in the same change room.</li> </ul>
		Make the pavilion feel safe by having good passive surveillance by maximising visibility through creation of clear sight lines, effective lighting, creating active edges of developments and the elimination of entrapment spots.
FLEXIBLE IN USE	The pavilion	Accommodate left and right-handed users.
	accommodates a wide range of individual preferences and abilities.	<ul> <li>Allow for variable height working surfaces and serving areas where possible.</li> </ul>
		<ul> <li>Limit floor level transitions, where required provide various ways to transition, ramps, stairs, lift.</li> </ul>
		<ul> <li>Use hardware that caters for multiple grip types.</li> </ul>
		<ul> <li>Consider including a space for quiet time for people with sensory sensitivities.</li> </ul>
		<ul> <li>Consider including a space for family use and breastfeeding.</li> </ul>
		<ul> <li>Provide gender-neutral spaces and supporting amenities where possible.</li> </ul>
		Consider including a prayer room for multi- faith users.
		<ul> <li>Consider including a changing places toilet to expand spectators https://changingplaces.org.au/</li> </ul>
SIMPLE AND INTUITIVE	Use of the pavilion is easy to understand regardless	<ul> <li>Reduce complexity in the design and layout of the building.</li> </ul>
	of the users experience, knowledge, language skills or concentration	Avoid dead end corridors and "rabbit warren" layouts.
	levels.	Provide clear line of sight to other spaces.

PERCEPTIBLE INFORMATION	The pavilion communicates effectively regardless of ambient conditions or sensory abilities.	<ul> <li>Remove clutter and make wayfinding intuitive.</li> <li>Use pictorial and tactile forms of communication and signage.</li> <li>Provide high contrast to essential building elements like doors and handles.</li> <li>Provide contrast between floor and walls to make spaces easier to navigate.</li> <li>Avoid overuse of material and colour changes.</li> <li>Use noise reducing materials where possible to avoid overly loud spaces.</li> </ul>
TOLERANCE FOR ERROR	The pavilion minimises hazards and the adverse consequences of accidental or unintended actions.	<ul> <li>Avoid floor to ceiling glass which can appear like an opening in the building.</li> <li>Use seamless floor transitions.</li> <li>Avoid sharp corners.</li> <li>Provide warnings of hazards.</li> </ul>
LOW PHYSICAL EFFORT	The pavilion can be used efficiently and comfortably and with minimal fatigue.	<ul> <li>Minimise the weight of doors to facilitate easy entry/exit.</li> <li>Promote the use of drawers for storage to minimise over reaching.</li> <li>Locate kit bag store at convenient height for players to minimise bending and reaching.</li> </ul>
SIZE AND SPACE FOR APPROACH AND USE	Appropriate size and space is provided for approach reach, manipulation and use regardless of body size, posture or mobility.	<ul> <li>Ensure wheelchairs can manoeuvre in the space (allow for U-turns).</li> <li>Provide adequate space to operate doors, appliances etc.</li> </ul>

An example of a changing places facility which can allow people with high support needs to participate in the cricket community.



Image courtesy of Bickerton Masters

# **Environmentally Sustainable Design (ESD)**

The overall objective of ESD is to promote sustainability initiatives during the development and ongoing use of cricket facilities. The aim is to go beyond best practice and achieve excellence in sustainability. Key benefits include adapting to climate change, reducing Cricket's environmental footprint, improved operational efficiency, reduced operating costs, and a healthier indoor and outdoor environment for users and the surrounding community.

ESD strategies for inclusion in new and/or refurbished sporting pavilion facilities include:

CONSIDERATION	DESCRIPTION	TIPS
MANAGEMENT	Sustainable design will only lead to sustainable buildings if the project includes a well-conceived management approach and an ongoing building management plan.	<ul> <li>Define ESD target early for appropriate cost and spatial allowances.</li> <li>Projects will ideally have a qualified sustainability consultant.</li> <li>Metering building services to track and analyse energy and water usage.</li> <li>Develop building user guide to encourage and recognise initiatives that will help building users to use the building more efficiently.</li> </ul>
ENERGY EFFICIENCY	Good building design can decrease power consumption, save money, reduce the impact of climate change and provide comfortable conditions for the building occupant.	<ul> <li>The facility will ideally be all-electric (powered by renewable sources) with no gas supply. This is to ensure the facility is "zero carbon ready".</li> <li>Passive design principles are to be implemented as recommended in established industry standards appropriate to the locality.</li> <li>Insulation levels for walls and roofs are to be 10% better than minimums set out on the NCC.</li> <li>Glazing between conditioned spaces and outside is to be double glazed.</li> <li>Energy efficiency of air conditioning equipment is to be verified via the Federal Government's Equipment Energy Efficiency (E3) program and listed on the public database (e.g. energyrating.gov.au).</li> <li>Natural ventilation is to be provided in accordance with NCC. This is in addition to any mechanical ventilation and air conditioning.</li> <li>Locate solar panels where they won't be fully or partially shaded. Ensure that they are easily maintained. Provide water tapping and a power point nearby for washing.</li> <li>Face panels north and tilt to optimum angle (discuss tilt with structural engineer as additional structure may be required to cater for uplift).</li> <li>Battery storage is a good option if the building will have high night-time usage.</li> <li>Locate batteries in a safe space out of direct sunlight. The further the inverter is from the sub-board or switchboard, the higher the installation costs.</li> </ul>

WATER	Simple design decisions can reduce consumption of drinking water and help to conserve precious water resources.	<ul> <li>Locating hot water units close to the point of use to reduce heat loss through pipes.</li> <li>Locating wet areas (bathrooms and laundries) and kitchens adjacent to each other.</li> <li>Using an alternative source of water such as greywater to water plants.</li> <li>Rainwater capture and reuse for toilet flushing unless there is recycled water available to the building.</li> <li>Oval irrigation: recycled water, moisture sensing.</li> </ul>
INDOOR ENVIRONMENT QUALITY (IEQ)	Best practice for IEQ is for building occupants to enjoy a comfortable space with good air quality, adequate daylight and ventilation	<ul> <li>Incorporate daylight into all spaces Undertake daylight modelling for deep spaces (+8M over).</li> <li>Design spaces to take advantage of natural cross ventilation to provide fresh air and passive cooling opportunities.</li> <li>Use materials with low volatile organic compounds (VOC) and off-gassing to reduce indoor air-pollutants.</li> </ul>
STORM WATER	Designing buildings and structures to reduce stormwater runoff improves the quality of our waterways.	<ul> <li>Confer with local authorities to determine if stormwater detention is required.</li> <li>Harvest as much roof area storm water as possible.</li> <li>For hard surfaces like concrete and asphalt, direct stormwater into rain gardens or open swales if possible.</li> <li>Include gross pollutant traps to filter any storm water entering the storm water system.</li> <li>Use porous paving where possible.</li> </ul>
TRANSPORT	In Australia, cars account for approximately 50% of our total transport greenhouse gas emissions.	<ul> <li>Provide bike loops to encourage visitors to ride to the facility.</li> <li>Consider providing end-of-trip facilities (e.g. showers and storage) for cyclists, walkers, runners etc. to encourage alternative travel methods.</li> <li>Where possible, connect the pavilion to a broader pedestrian or cycling network.</li> <li>Consider making provision for electric vehicles in the carpark.</li> </ul>
URBAN ECOLOGY	Buildings are part of larger urbanised environments and should consider designs that will contribute positively to the area.	<ul> <li>Use light coloured wall and roof materials to counteract the urban heat island effect.</li> <li>Reduce hard surfaces and increase the amount of landscape and vegetation.</li> <li>Retain as many existing trees and plants on site as possible.</li> <li>Plant native vegetation.</li> </ul>

# Design for longevity and disaster

Designing community spaces for longevity and disaster resilience involves considering various factors that can impact the longevity and resilience of the structure.

CONSIDERATION	DESCRIPTION	TIPS
SITE SELECTION  FLOOD AFFECTED SITES	Selecting a suitable site for the pavilion is crucial. The site should ideally be located away from potential hazards such as flood zones or landslide-prone areas. It should also be situated on stable ground and not be prone to soil erosion.  Consult with relevant water authorities to identify flood	<ul> <li>Potential hazards to consider when selecting sites:</li> <li>Flooding</li> <li>Bushfire</li> <li>Cyclone</li> <li>Land-slide prone areas</li> <li>Erosion</li> <li>Earthquake</li> <li>Termites</li> <li>Coastal / Corrosion</li> <li>Elevate floor above the flood line and freeboard.</li> </ul>
	levels. Flood water can be both hydrostatic (standing water) and hydrodynamic (flowing water), and in most cases will result in displaced foundation walls, collapsed structures, floating tanks, scouring and erosion.	<ul> <li>Grade ground surfaces away from the building (can double up as inclined viewing to cricket pitch).</li> <li>Raise heating ventilation and air conditioning (HVAC) plant and electrical equipment above flood levels.</li> <li>Use flood resistant building materials (concrete, glazed bricks, steel, treated timber).</li> <li>Allow for ample air flow and circulation to dry out internal spaces when floods recede.</li> <li>Anchor tanks to ground so they don't float.</li> <li>Install backflow devices to sewer and stormwater.</li> </ul>
BUSHFIRE AFFECTED SITES	Bushfires are a natural part of the Australian eco-system. All sites must have an appropriate response to bushfire dangers whether its direct exposer to flame or ember attack from fires nearby.	<ul> <li>Building siting is extremely important. Vegetation, landscape features, ignition sources, slope, aspect and access must all be considered.</li> <li>Simple elevations are recommended without changes of roof pitch.</li> <li>Use tight fitting, cladding and roof that is non-combustible.</li> <li>Avoid using box gutters. Use eaves gutters with leaf guards and locate so they are easily cleaned.</li> </ul>

#### MATERIAL SELECTION

The choice of materials used in the construction of the pavilion can impact its longevity and resilience. Durable materials are preferred over materials that are prone to decay or damage.

- Materials to consider:
- Brick and blockwork
- Structural steel
- Steel cladding
- Concrete
- Cement sheet
- Materials requiring careful design:
- Natural timber
- Engineered timber
- MDF / Plywood
- Render
- Materials to exclude:
- Unnecessary cladding
- Plasterboard (in flood prone areas)
- Foam polystyrene
- Composite aluminium panels

#### MAINTENANCE AND REPAIR

Regular maintenance and repair are critical for ensuring the longevity of the community pavilion. The pavilion should be designed with ease of maintenance in mind, such as easy access to critical components for repairs or upgrades.

- Locate plant areas and switchboards in easily accessible areas (elevate if site is in flood prone area).
- Include inspection openings and flush out points for stormwater and sewer systems.
- Avoid box gutters and ensure eaves gutters have leaf guards and are easily cleaned. Consider roof access and safety.

#### **RISK MANAGEMENT** AND EMERGENCY **PREPAREDNESS**

In addition to disaster-resistant design, community pavilions should also have emergency plans in place. This can include emergency lighting, evacuation plans, and emergency supplies and devices such as first aid kits and AEDs (Automatic External Defibrillators).

■ Have appropriate risk management plans prepared by suitably qualified people to inform the design and ongoing operation.



Image courtesy of the South Australian Cricket Association

# Master plan location and placement of the pavilion and supportive infrastructure

Master planning a pavilion, car park and supportive infrastructure is important for starting a new project or undertaking refurbishment works to an existing site. The master plan process will help to create a comprehensive and coordinated approach to development that is efficient, functional, inclusive, sustainable and adaptable over the long term.

A number of cricket friendly design elements should be considered through pavilion or change facility design, development or retro-fitting in order to improve the overall experience for players, umpires, spectators and families. Key master planning considerations include:

- Building location and placement
- Location of services and site access
- Viewing for players, scorers and spectators
- Shade and shelter provision
- Storage options for player and maintenance equipment
- Parking options for players and spectators
- Playground and amenities for community engagement
- Safety of all patrons.

As each site is different, it is difficult to achieve ideal placement and orientation for every building. However, ensuring that buildings are orientated towards the main or multiple activity areas is a critical success factor. Avoiding direct west facing sun for spectators and positioning buildings within close proximity to car parking and vehicle drop-off areas is also critical, as is creating pathways that promote easy access and a way to the building and its amenities.

Ensuring that the building has good solar access will result in heat gain from the sun, reduce energy requirements and improve comfort levels. External seating and shade should be provided for players, officials and spectators and incorporated within the building envelope where possible.

#### ESD tips

- Orient the building to take advantage of natural light and ventilation
- The building can be used to protect outdoor areas from prevailing winds and provide sun protection



#### UNIVERSAL DESIGN TIPS FOR LOCATION AND PLACEMENT OF PAVILION

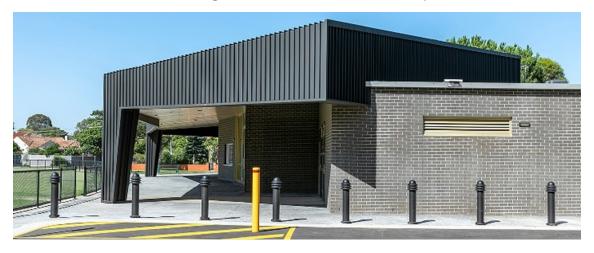
- Locate the pavilion and the spectator viewing areas near the car park.
- Ensure view lines from spectator viewing to playgrounds, public toilets, building entry, car park where possible.
- Build the pavilion and spectator viewing slightly elevated from the pitch but level with the car park.
- Avoid multiple level transitions from the car park to the pavilion.
- Provide rest areas and benches where users are required to walk long distances (+100m).

Hurlingham Park Pavilion showing north facing social room with the building and verandah providing player and spectator shade and shelter from the sun and rain.



Ben Wrigley Photography

R.G Chisholm Pavilion showing seamless transitions from car park to clubrooms.



Ben Wrigley Photography

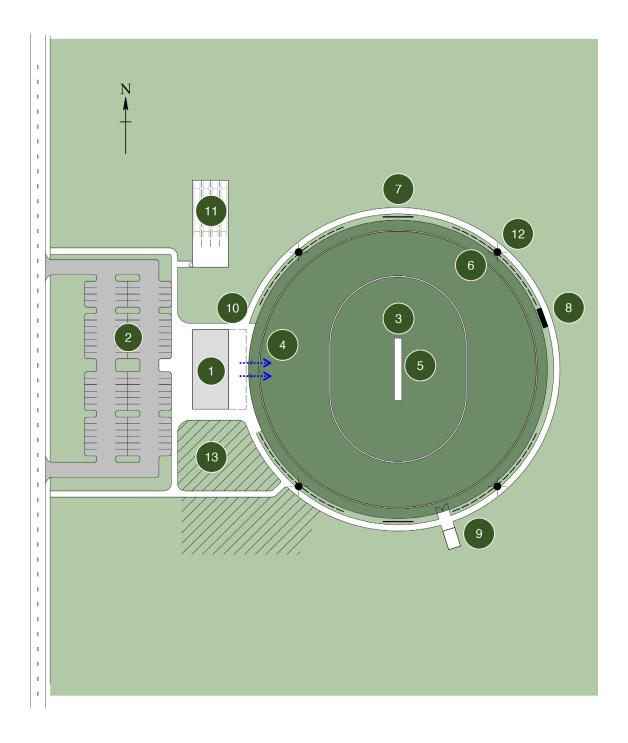
G.H Soppet Heritage Grandstand showing bridge link between first floor grandstand and new clubhouse social room.



Tom Roe Photography

# Site planning

The following annotated site plan provides guidance on how a typical cricket venue could be master planned to provide maximum benefit and flexibility for cricket use.



#	ATTRIBUTE / AREA	CONSIDERATIONS
	PAVILION	Pavilion location is a key passive design strategy and should consider:
		■ Facility orientation — ideally the active/spectating elevation of the building should face away from prevailing weather and towards the centre of the pitch. The building siting is therefore crucial at the early planning stages and will vary depending on local weather patterns.
		Any undercover spectator areas associated with the facility exposed to prevailing weather should be provided with roof overhangs or canopies. This will enhance the spectator experience by providing protection from sun glare, heat and rain.
		<ul> <li>Centrally located to enhance access to the pitch and to maximise views for spectators, players and team staff. At dual or multi playing field sites, locate pavilion centrally between the fields it is servicing.</li> </ul>
		■ Direct access to site entry points, car park and key activity areas.
2	CAR PARK	The site car park should be provided adjacent to the building and preferably behind the building, in order to:
		<ul> <li>Maximise spectating around the playing field and perimeter circulation</li> </ul>
		■ Provide direct access to building entry points
		<ul> <li>Limit risks associated with balls striking vehicles</li> </ul>
		Provide easy and direct, universal access for all patrons
3	PLAYING FIELD	It is recommended that cricket playing fields are orientated in a north-south direction to minimise the effect of a setting sun on players.
		■ Playing pitch orientation can be independent to cricket playing field orientation. For example, an oval sized for AFL could be orientated outside the cricket field limits (i.e. east-west) with the cricket pitch still orientated in accordance with guidance as above (i.e. north-south orientation).
		<ul> <li>Playing fields (including run-off areas) should be developed to accommodate the maximum recommended sizes for senior play, creating opportunities to reduce boundaries (via rope or line marking) for all relevant forms and formats of play.</li> </ul>
4	PLAYING FIELD — ACCESS AND EGRESS POINTS	If a fixed fence is included around the perimeter of the playing field, ensure single gates for pedestrians and double gates for maintenance and emergency vehicle access are provided.
	FOINTS	<ul> <li>Ensure fencing is also positioned outside the recommended minimum run-off distance from the boundary line/rope.</li> </ul>
5	CRICKET PITCH	■ In line with the playing field, it is recommended that both synthetic and natural turf pitches be orientated in a north-south direction to minimise the effect of a setting sun on players (refer to Guidance Note 2 for further details on optimum pitch orientation).
6	SAFETY NETTING	<ul> <li>Fencing that protects spectators and pedestrians or limits damage to neighbouring properties, infrastructure and vehicles is highly recommended, particularly in 'hot spot' areas prone to cricket balls being hit during play. An example of this would be placing safety netting between the field of play and a nearby playground. Vegetation and/or buffer planting can also be employed to assist in limiting risk.</li> </ul>
		• If installation of safety fencing is not feasible, it is recommended from a risk management and liability perspective that warning signage be placed around the playing field advising the public of the sporting activity taking place and to be aware when travelling past or parking their vehicle.

#	ATTRIBUTE / AREA	CONSIDERATIONS
7	SIGHT SCREENS	Whilst not required at all levels of community cricket, sight screens should be placed outside the minimum run-off area from the boundary line/rope at both ends of a playing field behind the bowler's arm.
8	SCOREBOARD	<ul> <li>Ensure the proposed location provides optimal visibility for spectators and players. If electronic, consider the impacts of afternoon sun glare on its visibility.</li> </ul>
9	STORAGE / CURATOR SHED	When deciding on the best location for a curator storage shed, ensure it is in close proximity to the playing field and that easy access to the playing field is available (e.g. double gates that enable vehicle access onto the ground).
		<ul> <li>Access between the storage facility and the playing field should be unimpeded by drainage infrastructure or other impediments to allow for rollers and maintenance vehicles to be used.</li> </ul>
		<ul> <li>To minimise building footprints and use of public open space, consider using the curator shed as a base for a scoreboard (be mindful of impacts of sun glare on scoreboard).</li> </ul>
10	SHADE/SHELTER	■ Whether it be permanent shelters with seating, extending a pavilion roofline to provide a verandah, shade sails, tree plantings (natural shade is preferred) or a designated area for a temporary shade structure, sheltered spectator areas provide a refuge from the sun during the hot summer months.
		■ Preferably, spectator shade/shelter areas should be positioned away from the batter's line of sight (e.g. not behind the bowler's arm) and if where possible, not being looking directly into the afternoon sun.
0	TRAINING FACILITIES	Preferably, cricket training nets should:
	(NETS)	<ul> <li>Not be located behind the bowler's arm (at either end of the ground)</li> </ul>
		<ul> <li>Not encroach onto the field of play (including hard surface bowler run-up areas)</li> </ul>
		■ Not present a risk of injury or damage to nearby infrastructure (e.g. pavilion, playground, shared pathway) if balls are hit out of the netting facility. Note: Full pitch length roof designs with aprons provide greater flexibility (limit balls exiting the training facility)
		Consider access by all users (e.g. those with mobility impairments)
		Not be situated too close to trees which can result in leaf debris on the pitch (resulting in potential dirt/mould build up if not removed) potential root ingress and/or shadowing (creating possible batter visibility challenges).
		<ul> <li>Where possible, be located on higher land (if site is located in a flood prone area)</li> </ul>
		<ul> <li>Not be positioned too far away from the pavilion or car park (resulting in players having to carry kit bags excessive distances)</li> </ul>
		<ul> <li>Consider backdrops in the context of player visibility (e.g. dark trees behind the bowler's arm)</li> </ul>
		<ul> <li>Refer to Guidance Note 03: Outdoor Training Facilities for more design level detail for training facilities.</li> </ul>

12	FLOODLIGHTING	<ul> <li>If installing playing field floodlighting, ensure light poles are located outside of the exclusion zones identified in AS 2560.2 and outside the recommended run-off area from the playing field boundary line/rope.</li> <li>Consider AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting</li> <li>If your venue is within a 6km radius of an airport, it is also recommended the relevant authority be contacted to determine whether any particular restrictions apply.</li> <li>Refer to Guidance Note 06: Floodlighting for more design level detail for lighting installations for cricket.</li> </ul>
13	SOCIAL AMENITIES	Other site features or attributes that add value to community cricket venues include: Playground, BBQ, naturally shaded spectator areas, embankments, access to toilets, place for mobile food and beverage vendors to temporarily operate from.
N/A	SITE SURVEILLANCE	<ul> <li>Restrict sight lines directly into player and umpire change areas and/or limit public access to these areas (particularly at lower profile sites — e.g. 'satellite grounds')</li> <li>Provide adequate lighting in and to-from car parks, as well as around pavilions</li> <li>Minimising of trees and high shrubs in areas where children congregate (e.g. near car parks, place spaces)</li> </ul>
N/A	LIVE STREAMING (E.G. FROG BOX)	<ul> <li>Consider the location of Live-streaming camera positions that provide a stable base, and clear and uninterrupted view of the pitch and playing field.</li> <li>Camera positions should also be placed away from main spectator viewing and congregation areas to minimise uncensored audio transmission.</li> </ul>

# Main pavilion

Pavilion facilities should be designed to be warm and inviting with a celebrated entrance that will provide a refreshed identity for the clubs and community. The design of the building and surrounding landscape features should focus on:

- Being a safe and welcoming space and precinct.
- Celebrate the club's history and identity.
- Siting of building, social room, spectator amenity to maximise views to the cricket pitch.
- Design for flexibility and multi-club use.
- Design to encourage broader community engagement through considered design.
- Fully DDA accessible across both the site and building.
- Intuitive wayfinding throughout to promote better community engagement and outreach to cultural and linguistically diverse communities.
- Materials and finishes that are locally sourced and durable to reduce overall maintenance costs during the life of the building.
- Plant and equipment to be easily accessible and located above flood levels.

#### **Entrance**

The entrance to the pavilion should be easily located from the main direction of approach, usually the car park. The entrance is the first space that visitors will encounter and needs to stand out to promote a welcoming, inclusive environment. After a visitor has entered the pavilion, it should be clear where they need to go, via a simple building layout and intuitive signage.

The entry foyer is an opportunity to have discrete club memorabilia and celebrate the history of the club and the game. The entrance door should be able to be opened by people of all abilities and have good passive surveillance from adjacent spaces.

#### GH Soppet Pavilion — Building Entry



Tom Roe Photography

#### **Community space**

This space is the heart of the club. It is where the players and officials will go for refreshments and where the club can engage with members of the community. The social space can be a shared space between multiple user groups and provide a source of potential revenue for clubs. Items to consider when designing the community space(s) include.

CONSIDERATION	DESCRIPTION
SPACE PLANNING AND LAYOUT	The layout of the room is crucial for its functionality. Consider the number of people who will use the room, and ensure there is sufficient space for seating, tables, equipment and storage. The room should be flexible and easily adaptable to different types of events and activities. Rectilinear spaces work best and ensure that there is intuitive wayfinding to toilets and the building entry.
VIEWS	The community room should be oriented in a way that provides the best views of the cricket pitch. This may involve positioning the room on an upper level, providing large windows or glass doors, or angling the room to face the pitch.
EXTERNAL AREAS	Access to outdoor areas is important in creating a versatile community room. Providing a connected outdoor space can be achieved through roof overhangs or verandahs.

ACCESSIBILITY	The community room should be accessible to everyone, including people with disabilities. Ensure that the design meets accessibility guidelines and provides features such as ramps, wide doorways and accessible restrooms.
KITCHENS	The scale and operation of the kitchen needs to be considered carefully in-line with the pavilion's anticipated level and volume of use. Commercial kitchens are costly and have highly specialised appliances. However commercial kitchens can assist with revenue generation via facility hire. The kitchen should have a servery directly to the community space, and should have a second opening to the outdoor space to double as a kiosk.
LIGHTING	Lighting is important to create an inviting and functional space. Consider the amount of natural light that the room receives, and supplement it with artificial lighting as needed. The lighting should be adjustable to accommodate different types of events and activities. Motion sensor lighting is recommended throughout to assist in managing operating and power costs.
ACOUSTICS	Acoustics is an important consideration, especially if the community room will be used for meetings or events. The design should include soundabsorbing materials to minimise noise and echo.
AESTHETICS	The community room should be aesthetically pleasing and inviting. Consider the colours, textures, and materials used in the design, and ensure that they create a welcoming and comfortable atmosphere.
TECHNOLOGY	The design should accommodate technology, such as audio-visual equipment, sound systems and Wi-Fi. Ensure that the room has appropriate outlets and wiring to accommodate the technology needs of the community. Technology that supports live scoring and live streaming has become a key consideration. Also include, hearing augmentation loops where amplified sounds is provided.
DEFIBRILLATORS	AED (Automatic External Defibrillators) are recommended at all venues and should be provided within a visible and accessible space (i.e. not locked in office areas or bars). AEDs have been designed to be used by the general community without formal training, and are equipped with verbal and visual instructions to guide the operator.

#### $\hbox{RG Chisholm Pavilion} - \hbox{View of kitchen serving to both social space and oval} \\$



Ben Wrigley Photography

Gerry Green Pavilion undercover area between social space and oval



Robert Hamer Photography

#### Special use rooms

There are different types of special use rooms that can be used strategically to increase participation and cater for broader community engagement.

CONSIDERATION	DESCRIPTION				
FAMILY ROOM	A small space that would be dedicated to breast feeding or changing children would promote families attending match days, training or club events. The space should be accessed from the spectator viewing area, close to the social room and have windows at high level for privacy.				
MULTI-FAITH ROOM	Promotes religious freedom, diversity, inclusion, and respect for cultural differences. It can enhance the overall experience of participants and spectators and contribute to a more harmonious and tolerant sporting community.				
SENSORY ROOM	Individuals with sensory processing difficulties, such as autism, ADHD or sensory processing disorder, can be highly sensitive to sensory input, including noise, light and crowds. A sensory room can offer a safe and comfortable space where individuals can regulate their sensory needs, reducing stress and anxiety levels.				
CHANGING PLACE	An accessible toilet and shower that is larger than standard to provide people with high support needs access to suitable, safe and private bathroom facilities.				

Special use rooms can have multiple functions if their basic requirements align. For example, a multi-faith room may also be a sensory room if the appropriate design measures are considered.

#### Change rooms

The design of change rooms for cricket should be developed in-line with overall site usage and users, including compatible or alternative sporting uses. The following features should be considered when designing change room facilities that accommodate cricket use.

- 1. Entry to the change rooms should ideally be at ground level, on grade (or ramped to comply with DDA standards) and adjacent to the playing field for ease of access for players. Where possible, avoid the inclusion of stairs as these limit access for all. Access points should be provided with weather protection and clearly visible with room signage. Provide a clear distinction and separation between player thoroughfares and spectator areas.
- 2. Change rooms can provide both locker storage and an area for players to change in a simple open plan layout. The room arrangement should ideally be rectangular to provide two opposing benches. Avoid island lockers/benches where possible, as they limit circulation.
- 3. Provide minimum space for 11 players for cricket in the changing space. If providing lockers, they should be constructed from a robust material (compact laminate or hardwood) and it is recommended that the following be included:
  - locker/bench compartments each 600mm wide minimum
  - a bench seat which is 600mm deep
  - an under-bench compartment for storing bags (1000mm overall depth)
  - a rear locker compartment behind the bench seat, with coat hooks or a hanging rail. The compartment should be 400mm deep and 1350mm high.
- 4. Provide additional lockers or change benches to accommodate other sports with more than 11 players.
- 5. Access to the amenities/wet area is to be provided directly from the changing space, with showers immediately adjacent to the locker area. Limit site lines from the change space to the amenities and provide showers as lockable cubicles to better accommodate all users. The minimum quantity of showers to accommodate cricket at all levels is three, but a greater number of showers for winter sporting codes may be required in multi-use facilities.
- 6. Toilets should be provided in accordance with the National Construction Code (NCC) and relevant sporting facility guidelines. A minimum of three toilet pans is preferred for cricket, however a greater number of toilets for winter sporting codes or other uses may be required in multi-use facilities. Toilets should be provided as lockable cubicles and be designed to ensure inclusion for gender diverse people. Avoid the use of urinals to better accommodate universal access. Each change room should have at least one ambulant toilet facility in accordance with Disability Discrimination Act (DDA) standards. Provide wash basins in close proximity to toilet facilities and accommodate NCC requirements based on the quantity of toilets.



Planning, design and managing change rooms spaces should reflect Cricket Australia's policies for safeguarding children and young people. Relevant policies can be accessed via:





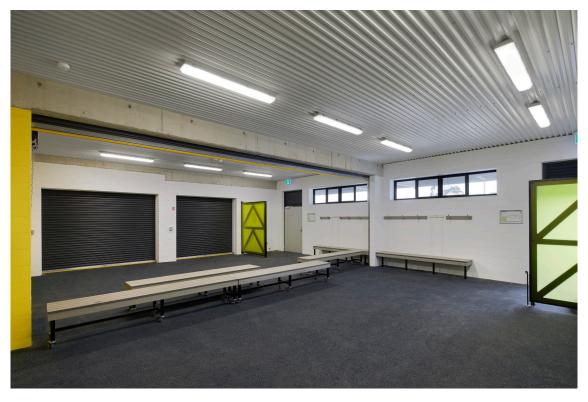
An Affiliated Association, Club or Indoor Centre may consider making their existing facilities more inclusive by

- changing signage on some facilities to gender neutral
- modifying changerooms and bathrooms to create private spaces (higher doors, floor to ceiling room dividers, shower curtains)
- ensuring all changerooms have appropriate sanitary and waste disposal.

Where new facilities are built or upgrades are taking place (whether in consultation with council, schools or others), Affiliated Associations, Clubs and Indoor Centres should consider options to create inclusive spaces by:

- creating private spaces so that people can use the facilities safely and comfortably
- providing a gender-neutral space where possible.

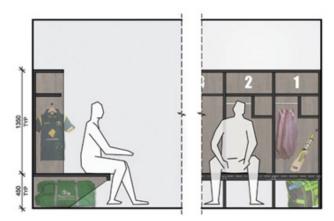
Corboy Pavilion Changeroom Facilities showing privacy screens at doorways, robust materials to walls and ceiling, natural light and ventilation through high level windows. Movable benches and roller door allow adjacent changerooms to be connected into a single large space.



Tom Roe Photography

#### Change room storage

Due to the large amount of equipment required for players (particularly batting equipment), adequate change room size and design that caters for player equipment kits is important. Seating that enables the storage of individual player kits underneath maximises use of the space and minimizes potential trip hazards.



Overhead storage can also be considered for additional equipment or personal belongings, particularly if floor space is restricted.

#### Storage options

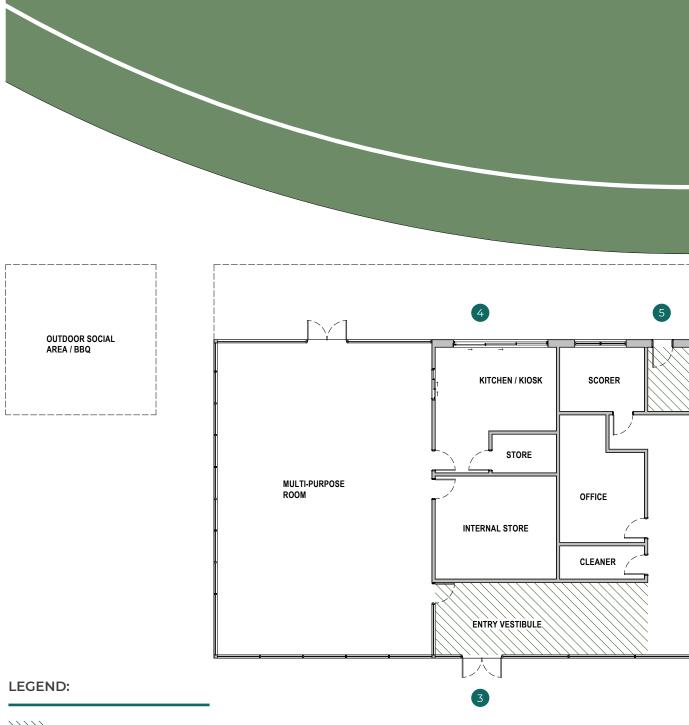
Where internal storage rooms are provided, they should be designed with shelves to maximise storage room capacity. Provision of separate secure areas or cages for storing seasonal user equipment is ideal to ensure all users can secure equipment on site.

External storage facilities for curator equipment and machinery is also recommended within close proximity to the playing field. Access between the storage facility and the ground should be unimpeded by drainage infrastructure or other impediments to allow for rollers and maintenance vehicles to be used. Storage facilities can also double up as a scoreboard foundation.

The following design features should be considered when planning a storage facility.

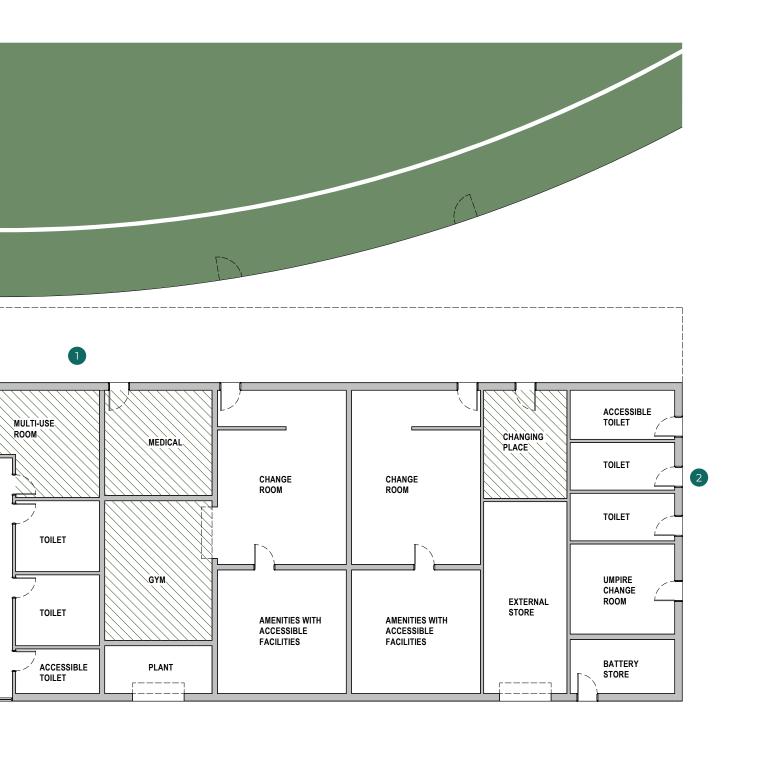
CONSIDERATION	DESCRIPTION
EQUIPMENT STORE ROOMS	Should be accessed via an external vertical roller door or double swing door to allow for direct playing field access. The storeroom should ideally be rectangular or square in shape, to allow for maximum perimeter storage.
PERIMETER STORAGE SHELVING	Can be fixed or adjustable shelving or open compartments for sports equipment or club goods. The height/vertical spacing of the shelves should be designed to accommodate the nature of the storage. Shelving should be constructed from robust materials and be provided with heavy duty supports, either to the wall or on a free-standing frame.
CURATOR SHEDS	Where curator sheds are provided, ensure that access to the playing field is on grade or ramped to suit the site levels for the pitch roller and other maintenance vehicles. Where the shed is raised, access can be achieved as a 1:8 step ramp, with 45 degree splays.
LOCKABLE GATES	Screen mesh (or similar) or solid doors to storage shelving and cupboards assist to prevent theft and vandalism.

#### Premier facility pavilion floor plan (Example only)

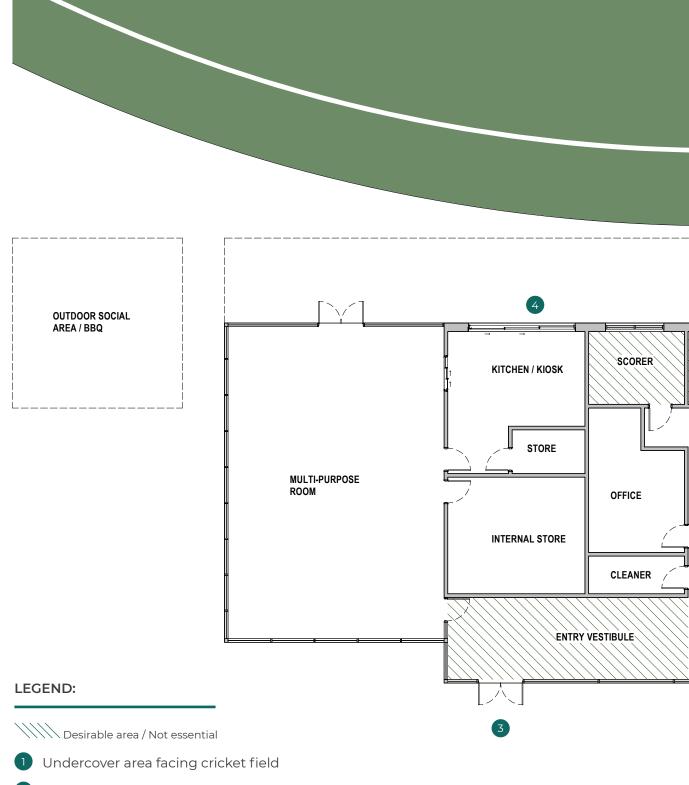


Desirable area / Not essential

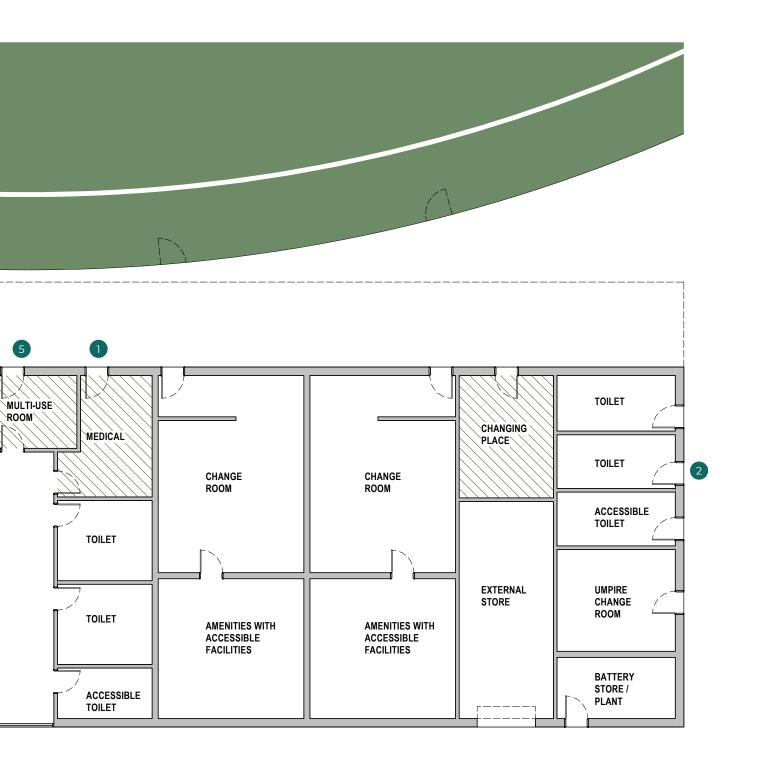
- 1 Undercover area facing cricket field
- 2 Public toilets grouped together with high visibility
- 3 Entry in prominent location
- 4 Kitchen / Kiosk has ability to serve out of multiple windows
- 5 Special Use Room can be a Multi-faith space, changing places, family room. Natural light and good access and visibility.



#### Club (Home) pavilion floor plan (Example only)



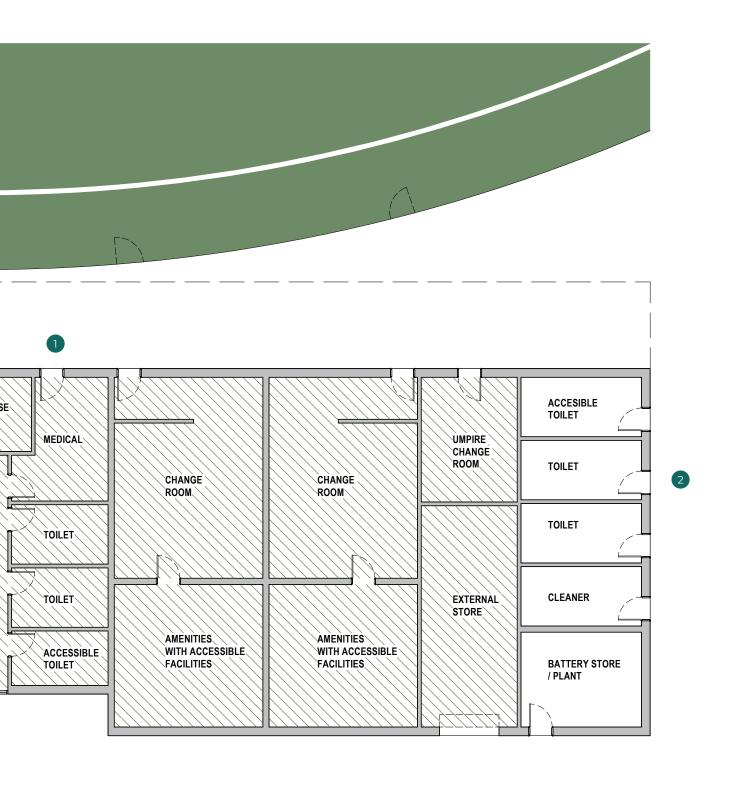
- 2 Public toilets grouped together with high visibility
- 3 Entry in prominent location
- 4 Kitchen / Kiosk has ability to serve out of multiple windows
- 5 Special Use Room can be a Multi-faith space, changing places, family room. Natural light and good access and visibility.



#### Club (Satellite) pavilion floor plan (Example only)



- Undercover area facing cricket field
- 2 Public toilets grouped together with high visibility
- 3 Entry in prominent location
- 4 Kitchen / Kiosk has ability to serve out of multiple windows
- 5 Special Use Room can be a Multi-faith space, changing places, family room. Natural light and good access and visibility.



#### Pavilion and amenity area schedules

The below area schedule outlines the required, desirable and optional areas for cricket pavilions and supporting amenities at each Premier and Community Club level of the cricket facility hierarchy. If designing a sporting pavilion, the schedule of areas outlined below should be considered in conjunction with other sporting code and community facility requirements and local planning and policy conditions. While these areas set the minimum preferred levels, exceeding these guidelines to meet a range of other uses and users may be a consideration of project partners at the early planning stages of your project.

PREFERRED SIZE (M2)			PREFERRED PROVISION LEVELS			
PAVILION AMENITIES	PREMIER	CLUB (HOME)	CLUB (SATELLITE)	PREMIER	CLUB (HOME)	CLUB (SATELLITE)
CHANGING ROOMS / AREA	35–55m2 x 2	35–55m2 x 2	35–55m2 x 2	Required  (2 change rooms per playing field)	Required (2 change rooms per playing field)	Desirable
AMENITIES (INCLUDING PLAYER TOILETS & SHOWERS)	25m2 x 2	25m2 x 2	25m2 x 2	Required (2 amenities areas per playing field)	Required (2 amenities areas per playing field)	Desirable
PAVILION TOILETS	Number and size of toilets to be determined via NCC	Number and size of toilets to be determined via NCC	Number and size of toilets to be determined via NCC	Required	Required	Required
CHANGING PLACE	15m2	15m2	15m2	Desirable	Desirable	Desirable
UMPIRES ROOM (INCLUDING SHOWER & TOILET)	15m2	15m2	15m2	Required (minimum 1 shower & 1 toilet)	Required  (minimum 1 shower & 1 toilet)	Desirable
MEDICAL/ FIRST AID ROOM	15m2	15m2	15m2	Desirable	Desirable	Desirable
KITCHEN + KIOSK	25m2–30m2  Commercial size kitchen to be considered	Provision dependent on level of venue capacity, use and activity	Assuming kiosk level amenities only	Required	Required	Desirable
KITCHEN STOREROOM (DIRECTLY ACCESSIBLE TO THE KITCHEN/ KIOSK AREA)	8m2	8m2	5m2	Required	Required	Desirable

#### **FACILITY DESIGN COMMENTS**

At a Premier and Club (Home) facility a minimum of two gender neutral changing rooms is required. At Club (Satellite) level venues, dedicated changing rooms are desirable. In many cases pavilions may not be provided at Club (Satellite) venues — in these cases, access to toilet amenities and drinking water is preferable. Where a single clubroom facility serves multiple home playing fields at any one site, two change rooms per playing field is preferred where practical.

Each change room requires its own designated wet area (shower and toilets) with privacy screening to adjoining areas. Both Premier and Club (Home) level facilities require a minimum of three lockable shower cubicles and three pan toilets. Include mirrors in conjunction with hand basins. Amenity areas should be designed to ensure safe usage by people of all genders. Appropriate sanitary disposal should be provided in all toilet cubicles.

Public (user group) and accessible toilets are a key component of all pavilions and should be provided at each cricket facility hierarchy level. It is recommended that accessible toilets be included within the main building footprint to support increased functionality. The size and fit out of toilet amenities will be dependent on building use, the documented requirements at the time of development, and forecast spectator and social attendances. Appropriate sanitary disposal should be provided in all toilet cubicles.

Changing Places toilets are larger than standard accessible toilets which provide people with disability and high support needs access to suitable, safe, and private bathroom facilities.

A self-contained changing room for use by umpires is required at both a Premier and Club (Home) facility. It is assumed that at these hierarchy levels that a minimum of two umpires are officiating at Premier level games and a minimum of one officiating at Club (Home) venues. Should independent umpires be officiating at Club (Satellite) venues then adequate change facilities should be provided. A single change room should include at a minimum one lockable shower cubicle (with adequate space to get changed), a toilet cubicle with sanitary disposal, washbasin, mirror and bench space. Secure locker storage is also recommended along with coat hooks.

Separate area to cater for desk and a treatment bed. This area would need to include a sink and should be lockable to ensure security of first aid materials and equipment.

Inclusion of an appropriate standard kitchen and kiosk facility is required at both the Premier and Club (Home) level facilities. The standard and level of kitchen provision (community or commercial) will be dependent on the current and forecast level of use and overall purpose of the venue. Planning of these spaces should be coordinated between tenant clubs and user groups and with land owners and funding providers. Where possible, kiosks and serveries should allow volunteers staffing the kiosk to be able to view the playing field and have the capacity to serve both indoors to the main social/community room and outdoors to spectators.

Access to storage immediately adjacent to the kitchen or kiosk area is required to assist with the efficient transportation of consumables to and from the kitchen or kiosk area. Provision of dry, cool and freezer storage should be considered in-line with the level of kitchen/kiosk provision, the type of food and beverage served (and stored), venue attendance levels and the likely turnover rates of produce and products.

PREFERRED SIZE (M2)			PREFERRED PROVISION LEVELS			
PAVILION AMENITIES	PREMIER	CLUB (HOME)	CLUB (SATELLITE)	PREMIER	CLUB (HOME)	CLUB (SATELLITE)
SOCIAL, COMMUNITY OR MULTI-PURPOSE ROOM (INDOORS)	150m2	100–150m2	80m2	Required	Required	Desirable
SOCIAL/ BBQ AREA (OUTDOORS)	As needed	As needed	As needed	Desirable	Desirable	Desirable
ENTRY VESTIBULE	As <b>required</b>	As <b>required</b>	As <b>required</b>	Desirable	Desirable	Desirable
ADMIN AREA/ OFFICE	15m2	15m2	15m2	Required	Required	Desirable
SCORERS' VIEWING AREA	8m2	8m2	8m2	Required	Desirable	Desirable
GYM/FITNESS ROOM	Provision of gym / fitness space to be based on club needs	Provision of gym / fitness space to be based on club needs	Provision of gym / fitness space to be based on club needs	Desirable	Not Required	Not Required
INTERNAL BUILDING STORAGE	30m2	30m2	20m2	Required	Required	Desirable
FAMILY ROOM	9m2	9m2	9m2	Desirable	Desirable	Desirable
MULTI FAITH ROOM	9m2	9m2	9m2	Desirable	Desirable	Desirable
SENSORY ROOM	9m2	9m2	9m2	Desirable	Desirable	Desirable
CLEANER'S STORE	5m2	5m2	5m2	Required	Required	Required
UTILITIES/PLANT ROOM	As <b>required</b>	As <b>required</b>	As <b>required</b>	Required	Required	Required
BATTERY STORE	As <b>required</b>	As <b>required</b>	As <b>required</b>	Required (new build)	Required (new build)	Required (new build)
EXTERNAL STORAGE	40m2	30m2	20m2	Required	Required	Desirable
CURATOR'S STORE/SHED	80m2	60m2-80m2	40m2	Required	Required	Required

#### **FACILITY DESIGN COMMENTS**

A space to conduct social events, club functions, gatherings and meetings and promote social interaction is integral to developing not only a strong and inclusive club culture but also club sustainability and local community cohesion. Size requirements for social, community or multi-purpose rooms will vary depending on the size of the club and teams, number of tenant clubs occupying the building and the diversity of additional venue users other than cricket. Social, community or multi-purpose rooms will often include specialised bar facilities and/or access to appropriate kitchen or kiosk servery. The social space should ideally provide viewing towards the main playing field via large windows and should be flexible in design to allow for multiple sporting club and community usage.

As cricket is generally played in the summer months, a dedicated landscaped area for social activity that may include BBQ space (permanent or portable BBQs) is highly desirable for post match or post training social activity.

An entry vestibule is a good way to create a milling space before the social room. The entry vestibule can also act like an airlock to improve sustainability outcomes as well as having display cabinets for club memorabilia.

A designated administration area provides a space for clubs to facilitate club management tasks and conduct private meetings and team selections if required. The administration area should provide access to technology connections, internet, wi-fi, telecommunications and include space for shelving, filing storage, computer etc.

A designated scorers' area (indoor) with clear views to the full playing field should be allowed for at Premier level. Dedicated scorer rooms are not required at other levels of community cricket, however an adequate sheltered space with clear sight lines to playing field and pitch is required at all venues. An unobstructed view of the scoreboard from the scorer area is also highly desirable.

Gym and fitness areas are not core requirements of cricket facilities however may be desirable for some Premier level clubs. Their provision should be considered in-line with tenant club and landowner consultation.

Adequate internal storage is required within all cricket pavilions. Internal storage areas should provide space for storage of club equipment, merchandise, fixtures that support flexible use and should be designed to achieve maximum storage capacity and promote safe manual handling practices.

A room for breastfeeding, preparation of bottles, changing etc. The space should have privacy and be accessed from the spectator area but close to the social space. The space should have a work bench with a sink.

Cricket is a global sport, and players from different cultures come with their unique religious beliefs. Having a multifaith room ensures that players can observe their religious practices, regardless of their faith.

A sensory room promotes sensory inclusivity, accommodates different sensory needs, enhances the overall fan experience, and supports individuals with sensory processing difficulties. It can contribute to a more inclusive and accepting sporting community and help create a positive and enjoyable experience for all fans.

Fit out to include an appropriate cleaner's sink, hot and cold water, shelving hooks and drainage. For large or multilevel pavilions, multiple cleaners store rooms may be required.

A separate utilities/plant room should be provided for any essential facility services. Size and requirements will be dependent on the servicing of the overall cricket clubroom building. Plant and services should also be located above flood levels.

Batteries are to be located internally wherever possible to protect against vandalism and environmental factors. Locate the batteries in areas that are easy to maintain, but out of public spaces. Consider the height batteries are installed above ground if your site is in a flooding zone.

An external storage facility secured with a durable roller door is recommended for the storage of training and match day equipment. Storage areas may need to provide separate secure areas (e.g. cages or lockers) for storing equipment used by a variety of users (seasonal or casual). This storage facility should not be used to house turf curator machinery and equipment which should be provided separately and in close proximity to the playing field and training nets.

Curator stores and sheds are assumed for turf cricket pitch venues only and should be developed large enough to house maintenance equipment, covers and small motorised vehicles and trolleys. A separate safe storage area for fuels and chemicals is also required to ensure compliance with OH&S and safe handling standards.

## CONTENT SUPPORT PARTNERS

Significant contributions from the following organisations are gratefully acknowledged and have helped to shape the content and development of the updated Guidelines:

- SportEng
- InsideEDGE Sport and Leisure Planning
- Bickerton Masters
- Arkhart Advisory





### BICKERTON MASTERS\_

Arkhart Advisory

# STATE AND TERRITORY CONTACTS

■ CRICKET ACT
■ CRICKET NEW SOUTH WALES
■ CRICKET TASMANIA
■ CRICKET VICTORIA
■ NORTHERN TERRITORY CRICKET
■ QUEENSLAND CRICKET
■ SOUTH AUSTRALIAN CRICKET ASSOCIATION
■ WA CRICKET
■ CRICKET AUSTRALIA



















### **APPENDICES**

#### Venue provision summary by hierarchy

Information presented with the Guidelines outlines the preferred levels of facility and amenity provision for community level cricket.

It sets aspirational targets for all existing venues to reach, as well as providing information from which to plan or redevelop existing venues.

The Cricket Facility Hierarchy outlined in Section 1 and summarised below defines Cricket facilities, their purpose and core cricket uses for Premier and Club level cricket facilities.

HIERARCHY LEVEL	FACILITY PURPOSE
PREMIER	Facilities primarily service Premier Clubs and facilitate the linkage between local level community cricket and underage representative competitions with the talent pathway.
CLUB (HOME)	Provide a mix of recreational and competitive cricket opportunities within a community club environment for local communities — clubs and venues connect with their associated turf or synthetic competition and pathway structure (for all age groups).
CLUB (SATELLITE)	Provides opportunities for club and school competition and social/recreational cricket. Venues often used as secondary or overflow grounds for junior and lower-level senior grades.

The **venue infrastructure amenities** identified in the following tables represent 'cricket's preferred levels of provision' in order to facilitate cricket training and matches at each hierarchy level. Consideration of compatible sports and alternative codes has been taken into account in developing theses guidelines, but they are not expressly represented in the following tables. Through all stages of site and venue planning, consultation with other users, sporting codes, Local Councils and schools should be undertaken in order to align user objectives and requirements.

These tables are best utilised in the preliminary scoping, feasibility and design stages of new venues and projects, but also be used to inform facility or site redevelopment projects. The definitions below have been used within the following tables and should be referenced to help explain cricket's preferences.

REQUIRED	Facility element required to ensure play can occur at relevant hierarchy level
DESIRABLE	Play can occur, but may be compromised or user experience lessened without it
OPTIONAL	Play can occur with little to no impact, on user experience

#### Pitches and Training Amenities

COMPONENT/CAPABILITY	PREMIER	CLUB (HOME)	CLUB (SATELLITE) WITH CLUBROOM BUILDING	CLUB (SATELLITE) NO CLUBROOM BUILDING
PLAYING FIELDS PER SITE (MINIMUM)	1	1	1	1
PLAYING FIELDS (DESIRABLE)	2	2	1	1
TURF PITCHES PER PLAYING FIELD (MINIMUM/ PREFERRED)	6–10	4–6	4–6	4–6
SYNTHETIC PITCHES PER PLAYING FIELD (SYNTHETIC PITCHES ONLY)	N/A	1	1	1
WARM SEASON GRASS SPECIES	Desirable	Desirable	Desirable	Desirable
IRRIGATION/ACCESS TO WATER	Required	Required	Desirable	Desirable
FLOODLIT PLAYING FIELDS (1 PER SITE ONLY)	Optional	Optional	N/A	N/A
PLAYING FIELD FENCING (1050MM OR 1200MM)	Desirable	Optional	Optional	Optional
PITCH COVERS FOR TURF PITCHES	Required	Required	Required	Required
PITCH COVERS FOR SYNTHETIC PITCHES	N/A	Optional (for synthetic pitch venues)	Optional (for synthetic pitch venues)	Optional (for synthetic pitch venues)
SIGHT SCREENS (PAIR)	Required	Optional	Optional	Optional
SCOREBOARD	Required	Temporary or Permanent (Required)	Temporary (Required)	Temporary (Required)
OUTDOOR TURF TRAINING PITCHES	8–12	4–6 (Optional)	N/A	N/A
OUTDOOR SYNTHETIC TRAINING PITCHES	2–4	3–6	2	2
TRAINING FACILITY MULTI- PURPOSE	Optional	Optional	N/A	N/A
POWER TO OUTDOOR TRAINING PITCHES	Required	Desirable	N/A	N/A
INDOOR TRAINING PITCHES	Optional	N/A	N/A	N/A

#### **Site Facilities and Amenities**

COMPONENT/CAPABILITY	PREMIER	CLUB (HOME)	CLUB (SATELLITE) WITH CLUBROOM BUILDING	CLUB (SATELLITE) NO CLUBROOM BUILDING
SPECTATOR SEATING (STRUCTURE)	Desirable	Desirable	Park benches	Optional
SPECTATOR VIEWING (COVERED)	Desirable	Desirable	Desirable	Desirable
SPECTATOR VIEWING (NATURAL SHADE)	Required	Required	Required	Required
SITE/PERIMETER FENCING	Optional	Optional	N/A	N/A
PLAYGROUND/SPACE OR YOUTH SPACE	Desirable	Desirable	Desirable	Desirable
WALKING PATH/TRAIL	Desirable	Desirable	Desirable	Desirable
CAR PARKING (INCLUDING DESIGNATED EMERGENCY VEHICLE PARKING)	Required	Required	Required	Required
EXTERNAL SECURITY/ SURVEILLANCE LIGHTING (FROM PAVILION TO CAR PARK)	Required	Required	Required	Required
SITE/VENUE SIGNAGE	Required	Required	Required	Required
BIN STORE	Required	Required	Desirable	Optional

#### **Club Facilities and Amenities**

COMPONENT/CAPABILITY	PREMIER	CLUB (HOME)	CLUB (SATELLITE) WITH CLUBROOM BUILDING	CLUB (SATELLITE) NO CLUBROOM BUILDING
PAVILION/CLUBROOMS	Required	Required	Required	
PLAYER CHANGE ROOMS (PER PLAYING FIELD)	2 x Gender Neutral <b>Required</b>	2 x Gender Neutral <b>Required</b>	2 x Gender Neutral Desirable	
AMENITIES (INCLUDING PLAYER TOILETS & SHOWERS)	Required (2 amenities per playing field)	Required) (2 amenities per playing field)	Desirable (2 amenities per playing field)	Assumes no building provided
UMPIRE CHANGE ROOMS & AMENITIES (PER PLAYING FIELD)	1 x gender neutral (with minimum of 1 lockable shower and 1 lockable toilet cubicle) Required	1 x gender neutral (with minimum of 1 lockable shower and 1 lockable toilet cubicle) Required	1 x gender neutral (with minimum of 1 lockable shower and 1 lockable toilet cubicle) Desirable	

COMPONENT/CAPABILITY	PREMIER	CLUB (HOME)	CLUB (SATELLITE) WITH CLUBROOM BUILDING	CLUB (SATELLITE) NO CLUBROOM BUILDING
KITCHEN + KIOSK	Required	Required	Desirable	
KITCHEN STOREROOM	Required	Required	Desirable	Assumes
SOCIAL/COMMUNITY ROOM (INDOORS)	Required	Required	Desirable	no building provided
ENTRY VESTIBULE	Optional	Optional	Optional	
SOCIAL/BBQ AREA (OUTDOORS)	Desirable	Desirable	Desirable	Desirable
DRINKING FOUNTAIN(S)	Desirable	Desirable	Desirable	Desirable
TOILETS (M/F OR UNISEX & ACCESSIBLE)	Required (Number and size to be determined via NCC)	Required (Number and size to be determined via NCC)	Required (Number and size to be determined via NCC)	Desirable (Number and size to be determined via NCC)
FIRST AID/MEDICAL ROOM	Desirable	Desirable	Desirable	N/A
CHANGING PLACE	Desirable	Desirable	Desirable	N/A
FAMILY ROOM	Desirable	Desirable	Desirable	N/A
MULTI FAITH ROOM	Desirable	Desirable	Desirable	N/A
SENSORY ROOM	Desirable	Desirable	Desirable	N/A
GYM/FITNESS ROOM	Optional	N/A	N/A	N/A
OFFICE/ADMINISTRATION/ MEETING	Required	Required	Desirable	N/A
SCORERS' BOX/VIEWING AREA	Required	Desirable Table & Chairs (shade and weather protected)	Desirable Table & Chairs (shade and weather protected)	Desirable Table & Chairs (shade and weather protected)
INTERNAL BUILDING STORAGE	Required	Required	Desirable	N/A
CLEANER'S STORE	Required	Required	Required	N/A
UTILITIES/PLANT ROOM	Required	Required	Required	N/A
BATTERY STORE	Required	Required	Required	N/A
EXTERNAL STORAGE	Required	Required	Desirable	N/A
CURATOR'S STORE/SHED	Required	Required for turf pitch venues	Required for turf pitch venues	Required for turf pitch venues

#### **Appendices – floodlighting**

#### **Level of Competition / Content Examples**



Level of competition/content examples current at time of publication. Please refer to online version of Guidelines in case of update. Cricket Australia also recommends that a Risk Management Plan be implemented at all venues with competition and/or training floodlighting provision to minimise the risk of injury to players, umpires, coaches and spectators whilst in use.

OUTDOO	R CRICKET
AS 2560.2 CLASS	LEVEL OF COMPETITION / CONTENT EXAMPLE (M=Male; F=Female)
ı	<ul> <li>International (M)</li> <li>International Cricket Council (ICC) fixtures, tour matches, Australia A, National Performance Squads (all formats)</li> <li>Domestic (M)</li> <li>BBL, Sheffield Shield, One Day Cup, Futures League</li> </ul>
II	<ul><li>Match Simulation – National/State (M)</li><li>— All formats</li></ul>
Ш	<ul> <li>International (F)         <ul> <li>Tour matches, Australia A, International Emerging Series</li> </ul> </li> <li>Domestic (F)         <ul> <li>WBBL and National Cricket League</li> </ul> </li> <li>Premier Senior – 1st and 2nd XI (M)         <ul> <li>All formats</li> </ul> </li> <li>National Youth Championships (U/19 M)</li> </ul>
IV	<ul> <li>Premier Senior – 1st XI (F)         <ul> <li>All formats</li> </ul> </li> <li>Premier Senior – All other (M)         <ul> <li>All formats</li> </ul> </li> <li>National Youth Championships (U/19 F)</li> </ul>
V	<ul> <li>Premier Senior – All other (F)         <ul> <li>All formats</li> </ul> </li> <li>Community Senior (M)         <ul> <li>All senior club cricket (below premier level), including competitions such as Warehouse, Sub-District, Veterans etc</li> <li>All format representative cricket matches/tournaments on the basis all players participating in the competition are from the same 'Community Senior' level of play.</li> </ul> </li> <li>National Youth Championships (U/17 M)         <ul> <li>Premier Junior (M&amp;F)</li> <li>All formats</li> <li>Junior Cricket Stage 3 (M)</li> </ul> </li> </ul>
VI	<ul> <li>Community Senior (F)         <ul> <li>All senior club cricket (below premier level)</li> <li>All format representative cricket matches/tournaments on the basis all players participating in the competition are from the same 'Community Senior' level of play.</li> </ul> </li> <li>National Youth Championships (U/16 F)</li> <li>Junior Cricket Stages 2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> </ul>
VII	<ul> <li>Junior Cricket Stage 1 (F)</li> <li>Cricket Blast (M&amp;F)</li> <li>Schools Programs (M&amp;F)</li> </ul>

CRICKET TRAINING OUTDOORS			
AS 2560.2 CLASS	LEVEL OF COMPETITION / CONTENT EXAMPLE (M=Male; F=Female)		
I	<ul> <li>International (M)</li> <li>International Cricket Council (ICC) fixtures, tour matches, Australia A, National Performance Squad</li> <li>Domestic (M)</li> <li>BBL, Sheffield Shield, One Day Cup, Futures League</li> </ul>		
II	<ul> <li>International (F)         <ul> <li>Tour matches, Australia A, International Emerging Series</li> </ul> </li> <li>Domestic (F)         <ul> <li>WBBL and National Cricket League</li> </ul> </li> <li>Premier Senior – 1st and 2nd XI (M)</li> <li>National Youth Championships (U/19 M)</li> </ul>		
III	<ul> <li>Premier Senior – 1st XI (F)</li> <li>Premier Senior – All other (M)</li> <li>National Youth Championships (U/19 F)</li> </ul>		
IV	<ul> <li>Premier Senior – All other (F)</li> <li>Community Senior (M)         <ul> <li>All senior club cricket (below premier level), including competitions such as Warehouse, Sub-District, Veterans etc</li> <li>Representative cricket training on the basis all players participating in the training activities are from the same 'Community Senior' level of play.</li> </ul> </li> <li>National Youth Championships (U/17 M)</li> <li>Premier Junior (M&amp;F)</li> <li>Junior Cricket Stage 3 (M)</li> </ul>		
V	<ul> <li>Community Senior (F)         <ul> <li>All senior club cricket (below premier level)</li> <li>Representative cricket training on the basis all players participating in the training activities are from the same 'Community Senior' level of play.</li> </ul> </li> <li>National Youth Championships (U/16 F)</li> <li>Junior Cricket Stages 2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> </ul>		
VI	<ul> <li>Junior Cricket Stage 1 (F)</li> <li>Cricket Blast (M&amp;F)</li> <li>Schools Programs (M&amp;F)</li> </ul>		

CRICKET TRAINING — INDOORS			
AS 2560.2 CLASS	LEVEL OF COMPETITION / CONTENT EXAMPLE (M=Male; F=Female)		
I	<ul> <li>International (M)</li> <li>International Cricket Council (ICC) fixtures, tour matches, Australia A, National Performance Squad</li> <li>Domestic (M)</li> <li>BBL, Sheffield Shield, One Day Cup, Futures League</li> </ul>		
II	<ul> <li>International (F)         <ul> <li>Tour matches, Australia A, International Emerging Series</li> </ul> </li> <li>Domestic (F)         <ul> <li>WBBL and National Cricket League</li> </ul> </li> </ul>		
III	<ul> <li>Premier Senior – 1st and 2nd XI (M)</li> <li>National Youth Championships (U/19 M)</li> </ul>		
IV	<ul> <li>Premier Senior (F)</li> <li>Premier Senior – All other (M)</li> <li>National Youth Championships (U/19 F)</li> <li>National Youth Championships (U/17 M)</li> <li>National Youth Championships (U/16 F)</li> <li>Community Senior (M)  <ul> <li>All senior club cricket (below premier level), including competitions such as Warehouse, Sub-District, Veterans etc</li> <li>Representative cricket training on the basis all players participating in the training activities are from the same 'Community Senior' level of play.</li> </ul> </li> <li>Premier Junior (M&amp;F)</li> <li>Junior Cricket Stage 3 (M)</li> </ul>		
V	<ul> <li>Community Senior (F)         <ul> <li>All senior club cricket (below premier level)</li> <li>Representative cricket training on the basis all players participating in the training activities are from the same 'Community Senior' level of play.</li> </ul> </li> <li>Junior Cricket Stages 1, 2 &amp; 3 (F)</li> <li>Junior Cricket Stages 1 &amp; 2 (M)</li> </ul> <li>Cricket Blast (M&amp;F)</li> <li>Schools Programs (M&amp;F)</li>		

INDOOR CRICKET		
AS 2560.2 CLASS	LEVEL OF COMPETITION / CONTENT EXAMPLE (M=Male; F=Female)	
I	<ul><li>International Series (M)</li><li>National Championships (M)</li></ul>	
II	<ul> <li>International Series (F)</li> <li>National Championships (F)</li> <li>National Indoor Cricket League (M&amp;F)</li> <li>Premier – Inter Centre Competition (M&amp;F)</li> <li>E.g. Super League Competitions</li> </ul>	
Ш	<ul><li>National Junior Championships (M&amp;F)</li><li>In Centre Competition (M)</li></ul>	
IV	<ul> <li>In Centre Competition (F)</li> <li>Junior Competition (M&amp;F)</li> <li>School Sports (M&amp;F)</li> <li>Entry Level Programming (M&amp;F)</li> </ul>	





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