

GUIDANCE NOTE 01
**Pitches &
Playing Fields**

INTRODUCTION

Cricket playing fields and pitches are diverse across Australia and are fundamental to participating in the game of cricket. It is critical they are provided to the best quality and standard as possible and maximise the use, enjoyment and experience of players at all levels.

This Guidance Note provides information on recommended cricket pitch and playing field dimensions, boundary lengths and sizes, ground and pitch orientation and preferred playing surfaces for cricket pitches, infields and outfield.

Changing formats of the game, in particular the rise in popularity of T20 cricket has increased the demand for modified training and match day facilities to suit a diversity of uses. These changes, albeit positive for the growth of the sport, have increased the complexity of cricket field planning and development for peak sporting bodies, local government and commercial facility owners alike.

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Information enclosed should be used when planning new grounds, measuring existing boundaries, checking compliance and installing new turf and synthetic cricket pitches.



Example of multiple north-south orientated playing field
Image courtesy of insideEDGE Sport and Leisure Planning

PLAYING FIELD AND PITCH ORIENTATION

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

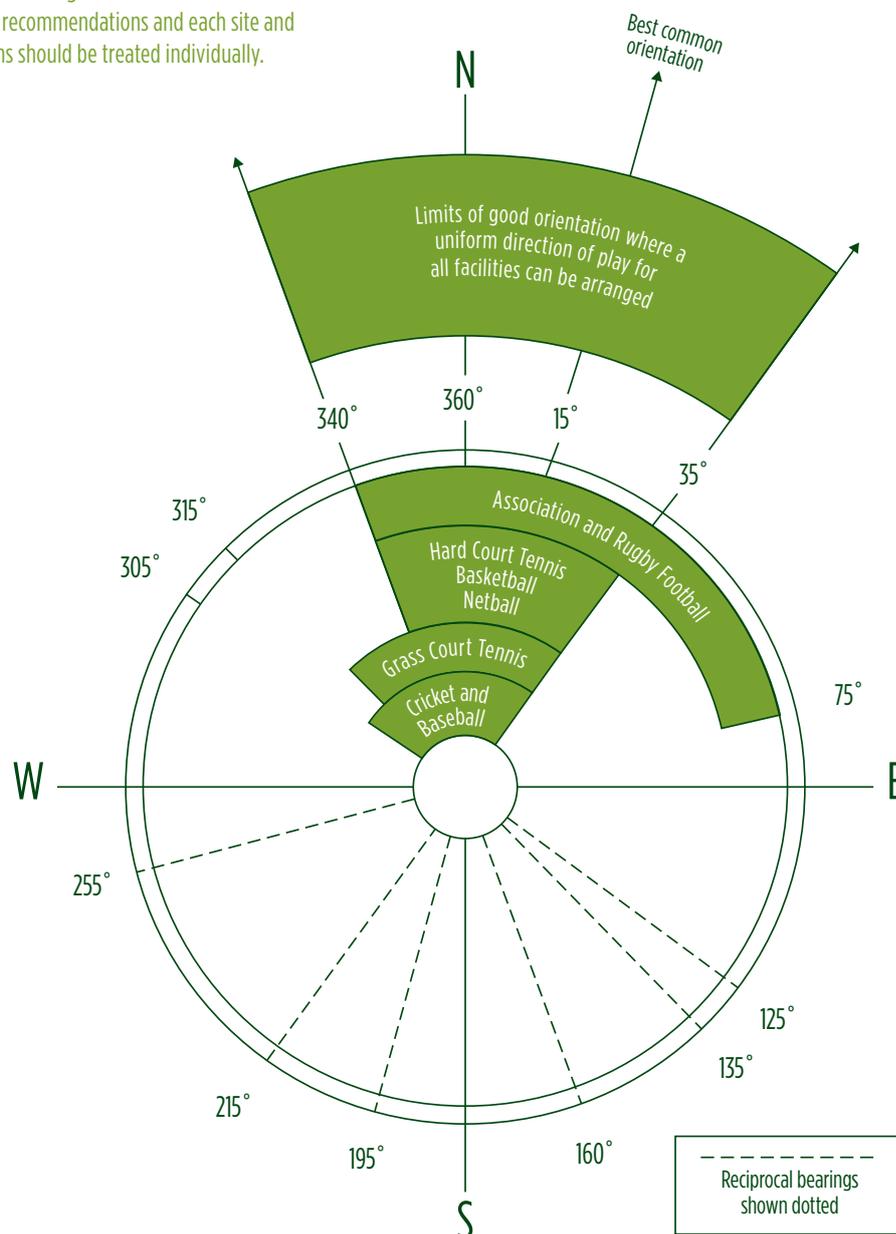
The time of day (early morning or late afternoon) and the time of year (winter or summer) has a bearing on optimum orientation. The aim however is to share between opposing participants the advantages and/or disadvantages of the sun's direction and natural factors such as breezes.

Limits of orientation where a uniform direction of play for all facilities can be arranged is depicted in the diagram below with a cricket field being between 45 degrees west of north and 35 degrees east of north.¹

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



It is recommended that cricket grounds and pitches are orientated in a north-south direction to minimise the effect of a setting sun on players, with a suggested optimum orientation of 10-15 degrees east of north.



¹ WA Sports Dimensions Guide for Playing Areas.

PLAYING FIELD DIMENSIONS

Playing field dimensions for cricket vary dependent upon their location and primary use.

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 is present (refer diagrams over page).

Cricket Australia recommends 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 outline recommended playing field dimensions for varying levels of cricket competition and associated age groups.

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 following dimensions as a way to guide the desired levels of play for each playing field.

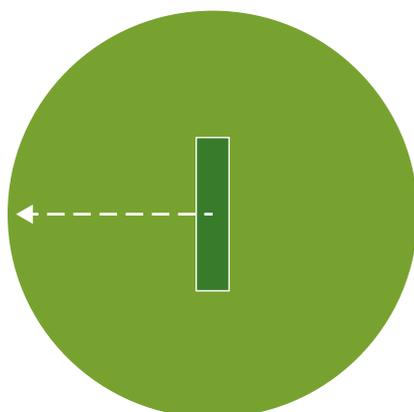
If existing playing fields do not meet minimum preferred playing field dimensions, Cricket Australia advises that relevant Clubs, Associations, Councils and land owners work together to seek a solution to ensure that play can be facilitated while maintaining the safety of players, spectators and other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

Where multiple playing fields are provided within the one playing area, a minimum 2m buffer between boundaries is recommended to reduce potential conflicts between grounds and games being conducted concurrently.



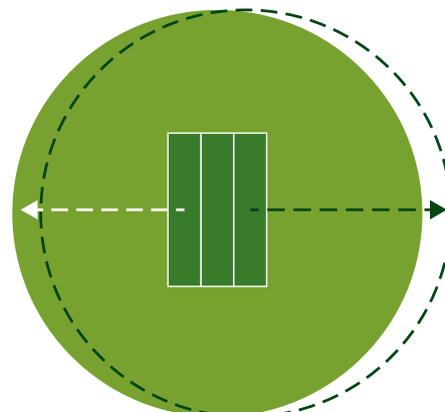
Plan for the maximum boundary size and rope off/line mark boundaries within the playing area to achieve the greatest range of cricket participation options.

The following diagrams represent how to measure playing field dimensions for both single pitches and turf tables.



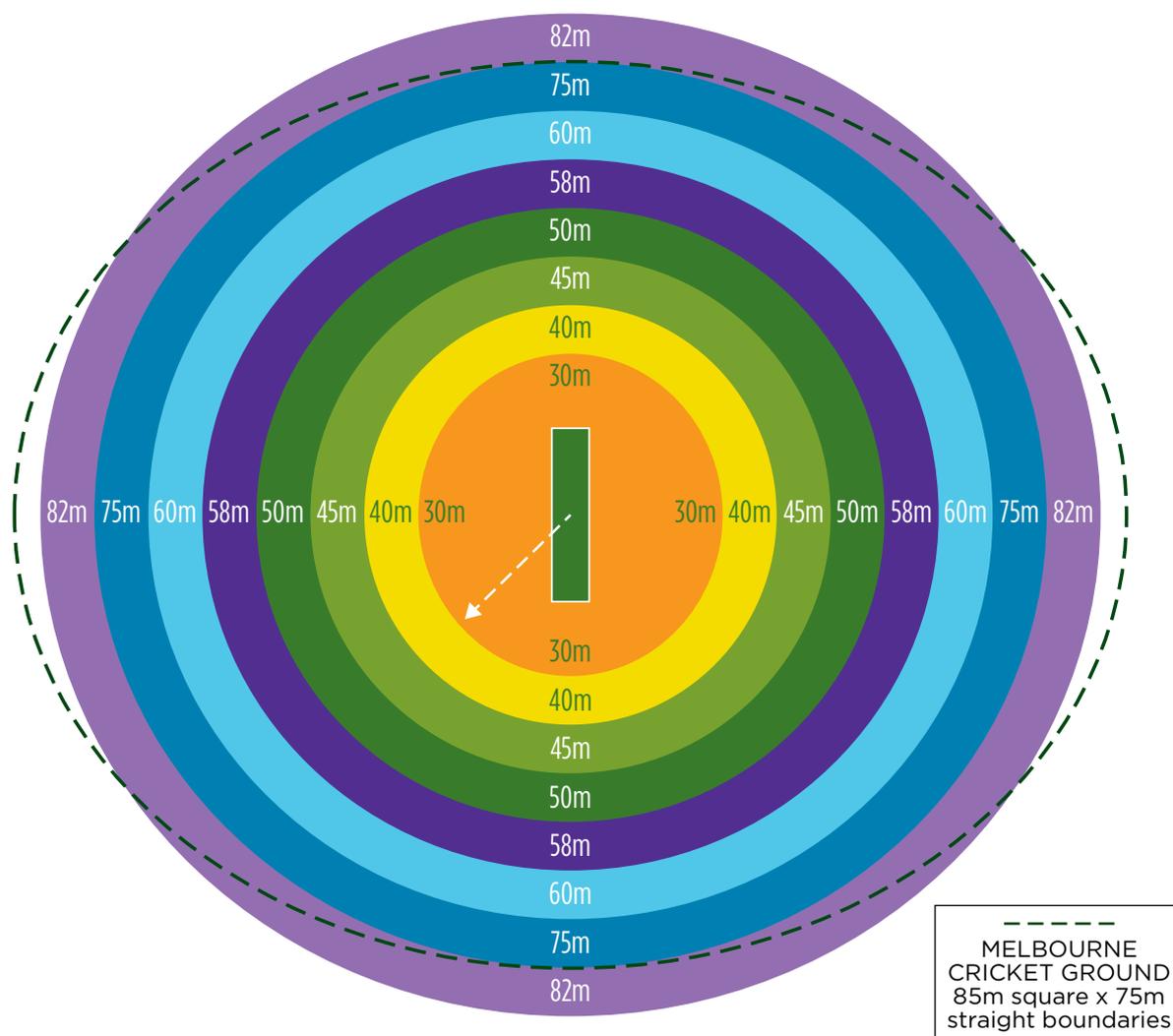
Measuring single pitch playing field dimensions

Measure boundary distance from the centre of the pitch.



Measuring multiple pitch or turf table playing field dimensions

Measure boundary distance from the centre of the pitch being used. This will require the overall playing field area to be slightly larger in order to meet minimum or recommended sizes for each pitch.



These dimensions correspond to the preferred playing field dimensions outlined in the following table

LEVEL OF COMPETITION	PREFERRED PLAYING FIELD DIMENSIONS	
	MINIMUM	RECOMMENDED
IN2CRICKET (AGES 5 TO 8)	25m	30m
UNDER 10	30m	40m
UNDER 12	40m	45m
UNDER 14	45m	50m
UNDER 16	45m	55m
OPEN AGE (COMMUNITY CLUB)	50m	60m
OPEN AGE (PREMIER/REGIONAL)	65m	75m
DOMESTIC MEN'S AND UNDERAGE NATIONAL MALE EVENTS	82m	82m
DOMESTIC WOMEN'S AND UNDERAGE NATIONAL GIRLS EVENTS	58m	58m



When designing and developing ovals, grounds and park precincts, buffer distances between cricket ground boundaries should be considered in relation to other park infrastructure including car parks, roadways, neighbouring properties, trails and playgrounds. Buffer distances of between 20m to 40m from boundaries are preferable 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.

INFIELD, OUTFIELD AND CLOSE-INFIELD DIMENSIONS

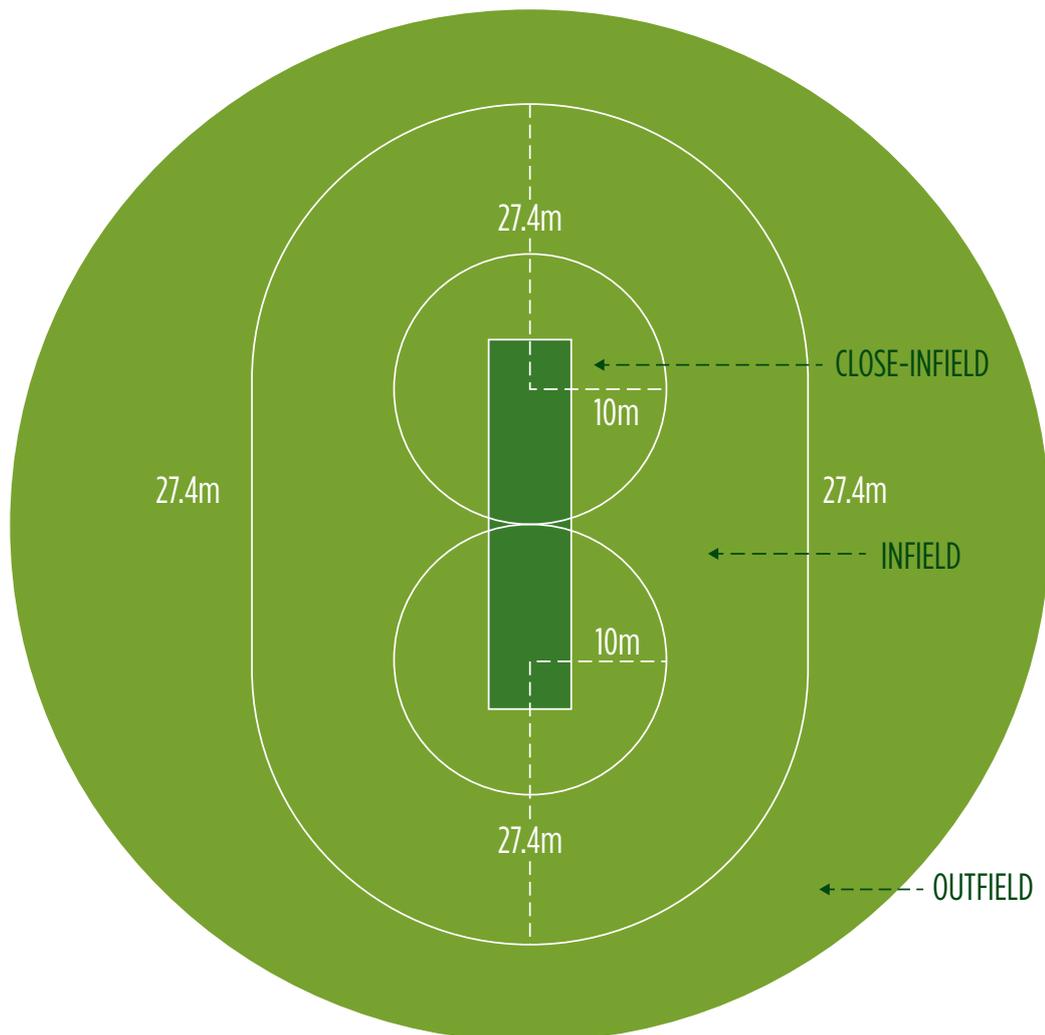
Ground users and maintenance personnel should refer to their local cricket association or competition rules for local requirements or specific restrictions regarding the use of close-infield and infield markings.

A painted oval is made by drawing a semi-circle of 27.4m radius from the centre of each pitch with respect to the breadth of the pitch and joining them with lines parallel, 27.4m to the length of the pitch. This line, commonly known as the circle divides the field into an infield and outfield.

Two circles of radius no closer than 10m centred from the middle stump at each end of pitch and often marked by dots, define the close-infield. The infield, outfield and the close-infield are used to enforce field restrictions and/or safety zones for some game formats and age groups. Distances are variable and Local Cricket Associations or competition administrators may provide alternative distances within their local rules.



Melbourne Cricket Ground



CRICKET PITCH DIMENSIONS

The following cricket pitch dimensions identify the recommended sizes for community cricket pitches.

Turf cricket pitches

The dimensions of a turf pitch are **20.12m long (from stump to stump), plus a minimum of 1.22m behind the stumps** to accommodate the return crease and bowler approach area. The width of a turf pitch is **3.05m wide**. The overall dimensions of a turf table will vary according to the level of cricket competition being played.

Synthetic cricket pitches

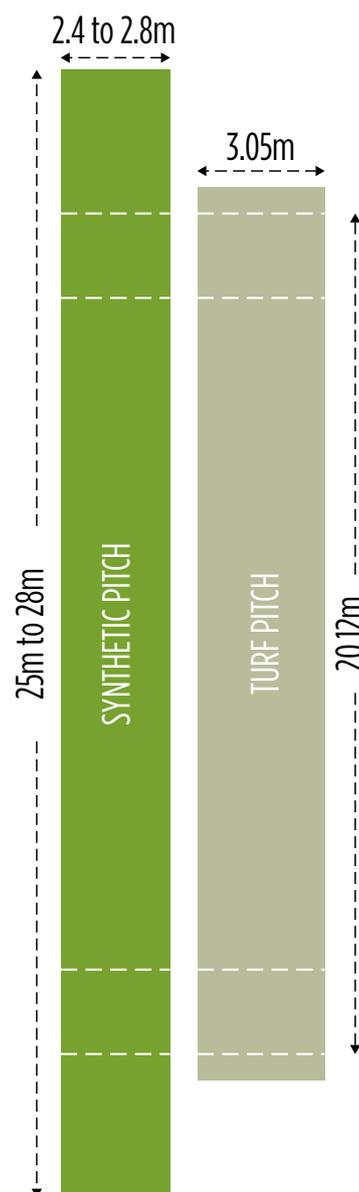
The dimensions of a synthetic cricket pitch should be in the range of **25.0m to 28.0m long and 2.4m to 2.8m wide**. Providing a pitch of adequate width is particularly important for junior development (promotes greater enjoyment if juniors are able to land the ball on the pitch) and also encourages 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.

**in2Cricket, T20 Blast and modified pitches

in2Cricket or other modified game pitches can be flexible in surface, including synthetic (permanent or roll out surfaces), concrete pitches or mown areas of ground outfields.



At venues where only cricket is played, plan for the maximum size for a synthetic cricket pitch being 2.8m wide x 28m long or for turf venues provide the maximum number of turf pitches for the relevant hierarchy and level of play.



LEVEL OF COMPETITION	PREFERRED PITCH TYPE AND DIMENSIONS	
	PITCH TYPE	RECOMMENDED
IN2CRICKET (AGES 5 TO 8)	Flexible**	To suit ability 13m to 16m x 2.4m – 2.8m
T20 BLAST (AGES 8 TO 12)	Flexible**	18m x 2.4m - 2.8m
UNDER 10	Synthetic	25m - 28m x 2.4m - 2.8m
UNDER 12	Synthetic	25m - 28m x 2.4m - 2.8m
UNDER 14	Synthetic	25m - 28m x 2.4m - 2.8m
UNDER 16	Synthetic	25m - 28m x 2.4m - 2.8m
OPEN AGE (COMMUNITY CLUB) – SYNTHETIC ONLY	Synthetic	25m - 28m x 2.4m - 2.8m
OPEN AGE (COMMUNITY CLUB) – TURF ONLY	Turf	22.56m x 3.05m (5-6 pitches)
OPEN AGE (PREMIER/REGIONAL) – TURF ONLY	Turf	22.56m x 3.05m (8-10 pitches)
DOMESTIC CRICKET AND UNDERAGE NATIONAL EVENTS	Turf	22.56m x 3.05m (10 pitches)

¹ Cricket Australia

The 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.¹

The 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.²

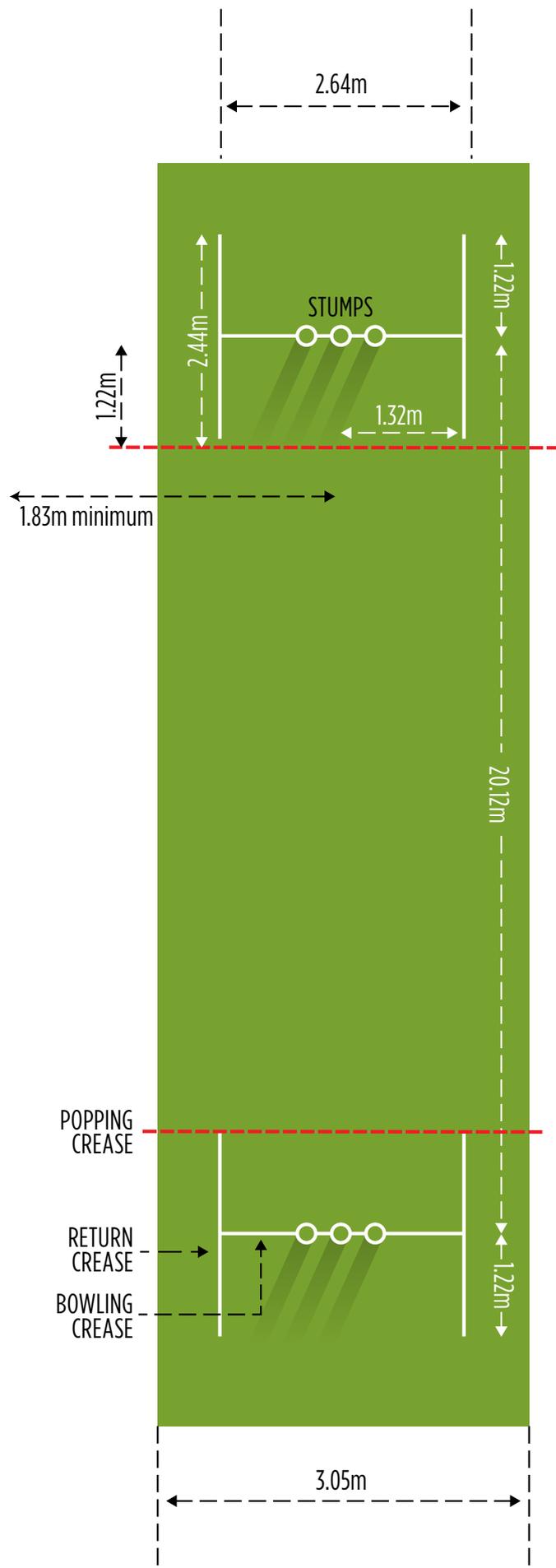
The return crease

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.³

¹ WA Sports Dimensions Guide for Playing Areas.

² WA Sports Dimensions Guide for Playing Areas.

³ WA Sports Dimensions Guide for Playing Areas.



SYNTHETIC CRICKET PITCHES

Synthetic cricket pitches comprise of a concrete pavement with a short pile height synthetic grass pitch glued to the pavement. The cricket pitch should be a rigid pavement consisting of a concrete base and underlying crushed rock sub-base designed to cater for the subgrade conditions.

The concrete surface is finished smooth (not polished) for the laying and gluing of the synthetic grass pitch. The synthetic grass surface should be a short pile height synthetic grass (9-11mm) and be laid over the total length and width in two halves with holes for the stump boxes.

Suggestions for installing a synthetic cricket pitch:

- Test existing subgrade material and design rigid pavement to cater for existing ground conditions.
- Mark out area for construction of concrete slab for size.
- Excavate area to depth of rigid pavement and dispose of excavated material.
- Laser level area.
- Supply and lay crushed rock base layer (minimum 50mm) to area and compact and laser level (note: crushed rock layer to extend a minimum of 150mm beyond the edge of the concrete pavement).
- Box off area in preparation for pouring of concrete.
- Supply and place reinforced chainmesh to area (generally centrally located within thickness of slab).
- Supply and pour 25 MPA concrete to required depth of 100mm to area and smooth finish surface for laying of synthetic cricket grass material.

Independent research conducted by Cricket Victoria in association with 11 Metropolitan Melbourne Councils concluded that **Cricket's endorsed 9mm-11mm synthetic surface type provides the most consistent playing surface**. The bounce and pace of this pitch type is more predictable and promotes skill development and player safety.

The research further found that other types of cricket pitch surfaces (e.g. those with a longer pile and/or supplied with crumbed rubber) tested have greater variation in pace and bounce which often arises from their design and also from how well they are maintained. Generally, the tested pitches other than the style of pitch endorsed by Cricket Victoria are slower and have a higher (or "trampoline" type) bounce.

Cricket Australia recommends using a 9mm-11mm synthetic pitch pile as it provides a more positive experience for all players. Due to different skill sets being required for different surfaces, if players (juniors in particular) are constantly playing on surfaces with different bounce and pace characteristics, their skill development, safety and confidence will likely be negatively affected.



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.



Synthetic pitch pile heights (IMPORTANT): Synthetic grass cricket pitch surfaces should range from 9mm-11mm pile height without any sand or crumbed rubber filling.

SYNTHETIC CRICKET PITCH EXTENSIONS

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

Consideration of pitch extensions should include an assessment of the run-up conditions, identification of potential risks and hazards to players and consultation with land managers and other ground users to identify other possible impacts.

Extensions may include a 5m-10m extension at both ends of the pitch and 0.5m-2.0m extension on the sides of the pitch, which should abut the synthetic grass pitch and be anchored at the edges to avoid tripping hazards.

Any consideration of pitch extensions should be undertaken in consultation with winter sport users and as a minimum must meet AFL - Cricket Australia performance requirements for artificial turf.



Example of extended pitch area at Lilydale Recreation Reserve (VIC)



Example of extended pitch area at Montrose Reserve (VIC)



Any synthetic grass pitch surround or extension is likely to impact on winter sport usage and user groups must be consulted prior to installation. All installations must meet AFL-Cricket Australia approved performance requirements for artificial turf.



Avoid 'winged' styled synthetic pitches where possible as these present potential maintenance and trip hazards and can increase capital costs.



SYNTHETIC CRICKET PITCH COVERING

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

COVER METHOD	IMPACTS AND CONSIDERATIONS	TYPICAL INSTALLATION EXAMPLE
SYNTHETIC PITCH COVERS	<p>Synthetic pitch covers can be placed over pitches during the winter season. When using synthetic pitch covers it is important to ensure that covers used meet AFL-Cricket Australia approved synthetic turf product performance and testing standards. Synthetic covers require the brooming in of rubber granules when laid and the vacuuming of them out prior to lifting them off.</p> <p>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.</p>	
COVER WITH SOIL	<p>This is the most common method of community level synthetic cricket pitch covering during the off season 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.</p> <p>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.</p> <p>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.</p>	

TURF CRICKET PITCHES

The overall dimensions of a turf table and number of individual pitches will vary according to the level of cricket competition being played. The Cricket Australia facility hierarchy recommends the following levels of provision.

Domestic/Underage national

10 pitches to accommodate a combination of domestic cricket matches, carnivals and regular weekly fixtures.

Premier/Regional

8-10 pitches 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.

Community Club (home or satellite grounds)

5-6 pitches 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 are able to be provided at this level of venue.

The slope of a turf pitch should not exceed 1% and follow the slope pattern of the oval. If the oval is centre sloped, the pitch square should also slope from the centre. The amount of fall should therefore not exceed 30mm across a 3.05m strip or 200mm along its length, being as flat as possible at the centre. The pitch square should be about 75mm above the level of outfield to allow for surface drainage off the pitch.¹



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 pitch set ups 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.

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.



Dual turf and synthetic pitches

¹WA Sports Dimensions Guide for Playing Areas.

NATURAL PLAYING FIELD SURFACES

Ideally, cricket playing fields should fall in all directions from the centre pitch area, but failing this, they should have a single phase slope of 1% in any convenient direction. If the oval is on very well drained soil, no slope is required.¹

From a playability and water conservation perspective, preferred playing surfaces are generally warm season grasses. Determining the most appropriate species for local conditions and climate should involve consultation with turf management specialists and be considerate of soil conditions, drainage and irrigation requirements, usage and ground maintenance service provision levels.



Blackman Park, Lane Cove (NSW)
Image courtesy of insideEDGE Sport and Leisure Planning

Artificial turf playing field surfaces

In 2007 the AFL and Cricket Australia endorsed the playing of community level Australian Rules Football and Cricket on synthetic surface playing fields.

The approved synthetic surface types were subjected to a series of stringent laboratory tests and criteria developed by the University of Ballarat which related to durability, joint strength, resistance to weathering, ball roll and bounce, hardness, critical fall height, traction and abrasion. The benefits of the testing and certification process are as followed:

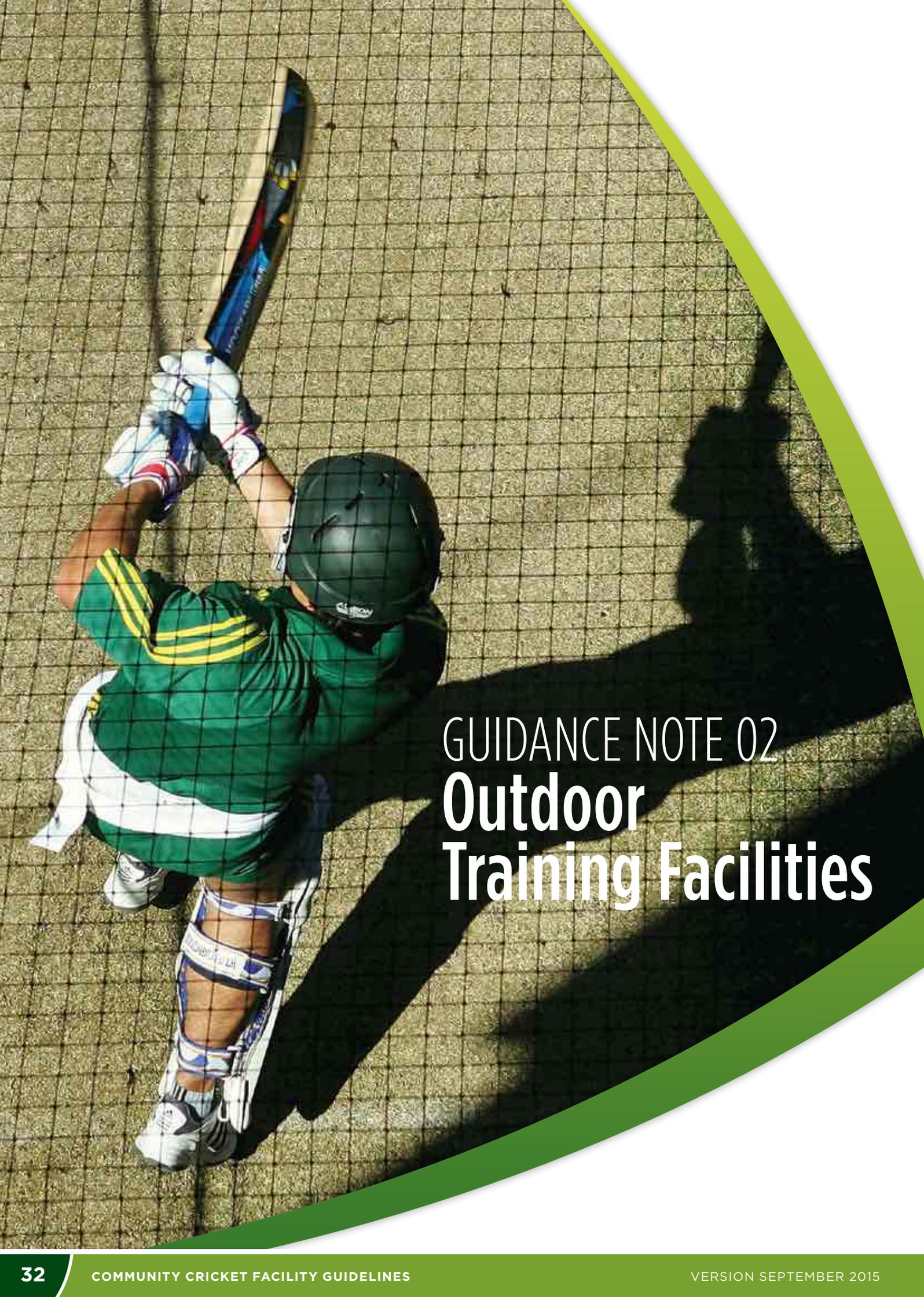
- Ensuring surfaces have the same playing characteristics as natural turf
- Ensuring quality and durability of the product
- Maximising playing comfort and safety.

Since the development of the synthetic turf standards, the AFL and Cricket Australia have established a licensing program that ensures the quality of products being manufactured from a performance and longevity perspective and that the products comply with safety and insurance requirements. For more information on synthetic surfaces for AFL/Cricket please **refer to Guidance Note: 05.**



Drop-in synthetic pitch

¹ WA Sports Dimensions Guide for Playing Areas



GUIDANCE NOTE 02
**Outdoor
Training Facilities**

INTRODUCTION

Whether it be a midweek training session, pre-match warm up, lunchtime hit with school friends or an opportunity to test the new bat out with family or friends at the local cricket ground, outdoor training nets are a core facility component across all levels of cricket.

More often than not, cricket nets provide the setting for a young cricketer's first experience with the game and provide an integral platform for player skill and technique development.

Outdoor training nets comprise of both synthetic and turf cricket pitch surfaces and have historically been designed using a variety of materials and layouts. This Guidance Note outlines Cricket Australia's recommended levels of provision and design elements of outdoor training nets and should be used to help guide future cricket net development and/or redevelopment.

Australian Standards

No Australian Standard specific to cricket net design in Australia currently exists. The following standards relating to cricket net materials are available and should be adhered to when developing new or refurbishing existing cricket net facilities.

AS1725.4 – 2010: Chain link fabric fencing – Cricket net fencing enclosures

AS1725.1 – 2010: Chain link fabric fencing – Security fencing and gates – General requirements

Purpose of training nets

The primary function of cricket nets is to enable both batsmen and bowler skill and technique development, and if designed accordingly can accommodate fielding and wicket keeping training drills and activities. Cricket nets serve to stop the ball travelling long distances once hit by a batsman and provide opportunities for multiple batsmen and bowlers to train simultaneously. With the ability to be constructed in confined spaces, cricket nets save time through eliminating the need for fielders and also allow greater intensity of training, particularly when multiple pitches are used. If designed correctly they also provide a safe training environment for players and coaches alike and are ideal for junior training sessions and school playgrounds.

Training net planning principles

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

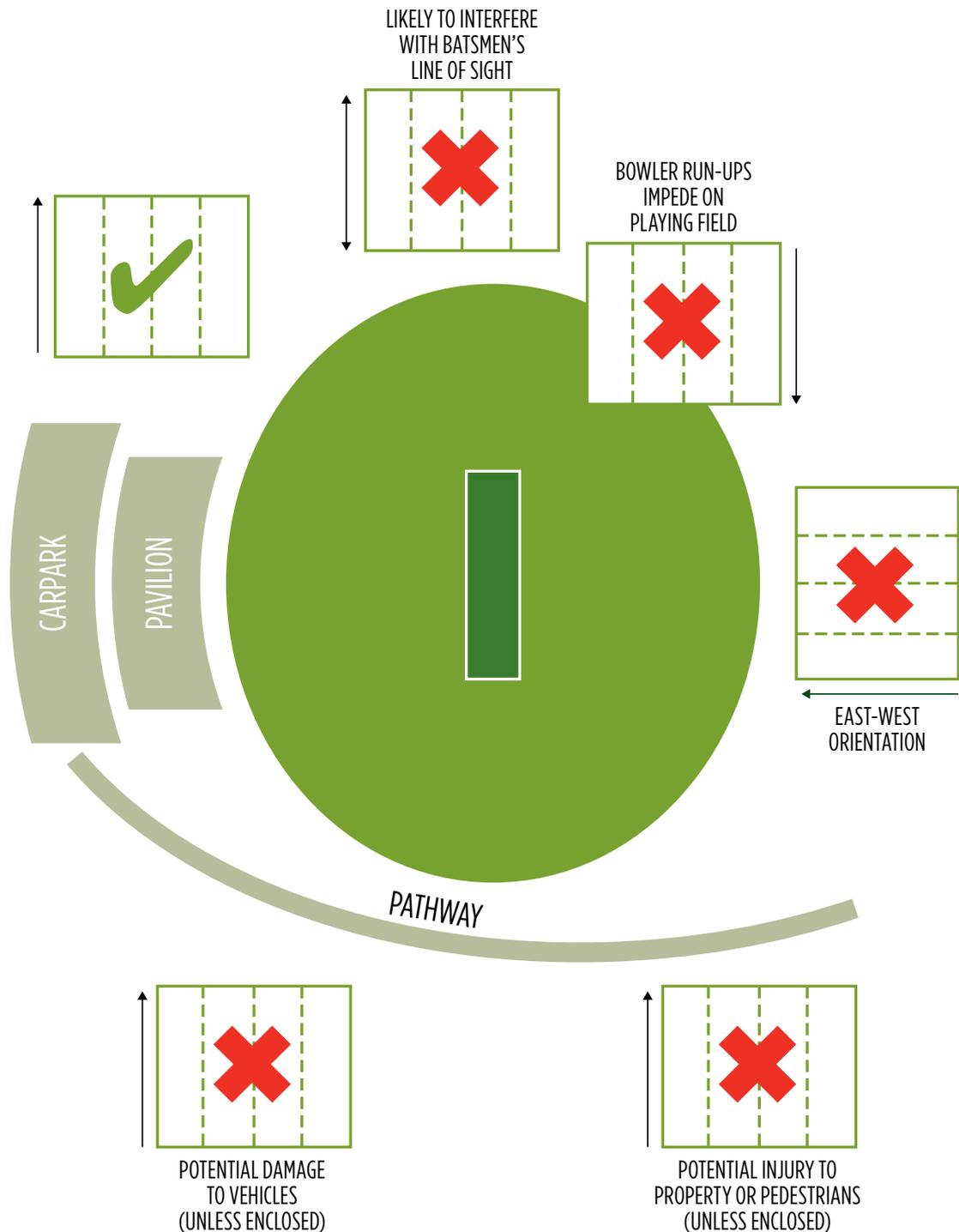
- Training nets and run-ups should be positioned off the field of play.
- Nets should not be positioned in a location likely to interfere with the match (e.g. behind the bowler's arm causing potential distractions to the batsman).
- Nets should be orientated in a north-south direction.
- Nets should be positioned in a location where there is minimal chance of injury to passers by or damage to property and/or vehicles. This planning consideration is not applicable if training nets are enclosed.
- Nets should be positioned as close to the pavilion as possible to minimise distance to transport equipment.

Training net orientation

Cricket training nets should have a north-south orientation, or a maximum of 30 degrees east or west of north (for practice pitches only). 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.

Training net 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.



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Information provided in this Guidance Note should not be used as a substitute for specialist design advice and where necessary, specialist engineering advice should be sought.

TRAINING NETS HIERARCHY

The cricket facility hierarchy provided in Section 1 and the venue provision summary in Section 3 identifies a range of practice pitch options for different levels of play.

The number of 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 (i.e. are there multiple grounds onsite)
- ground 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 below and adjacent tables provide a guide as to a desired level of provision (number of pitches and surface types) for differing levels of competition and club size.

HIERARCHY LEVEL	NUMBER OF PITCHES	
	SYNTHETIC	TURF
PREMIER/REGIONAL (TURF)	2-4	8-12
CLUB HOME (TURF)	3-4	4-6
CLUB HOME (SYNTHETIC)	3-6	0
CLUB SATELLITE	2*	0

*Desirable



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

PREMIER/REGIONAL		<p>A combination of turf (8-12 pitches) and synthetic (2-4 pitches) training nets are appropriate for venues that host premier or regional level cricket competition and serve a regional or municipal catchment area. An enclosed synthetic training facility (6 pitches) with two publicly accessible bays is recommended for a large club or regional level facility that hosts synthetic pitch cricket competition.</p>	
CLUB (HOME)		<p>For a community club level facility (home ground) with a club competing in synthetic or turf competitions a minimum of 3 synthetic training nets is recommended and 4 turf nets (if playing on turf). A combination of both turf and synthetic is also recommended for a club playing turf competition as it provides an alternate training arrangement in the event of inclement weather or underprepared turf training nets. All synthetic nets should be publicly accessible.</p>	
CLUB (SATELLITE)		<p>For club satellite grounds (secondary or overflow grounds) or local school facilities, it is desirable to provide two publicly accessible training nets. Two pitch training nets support pre-match warm up and provide a hit up space for school activities.</p>	

Synthetic
 Turf

TRAINING NET DESIGN

The following pages provide several recommended design options, standards and tips when developing new or refurbishing existing cricket nets.

The below recommendations should be read in conjunction with cricket net design options and used to guide future cricket net facility development. Training net designs should be treated on a site-by-site and needs basis, with consideration given to the level of use, intended function (e.g. multi-purpose enclosure or cricket specific), available open space and relationships with surrounding infrastructure. Four key guiding design principles to consider when planning cricket nets include:

Safety – ensure the nets and surrounds are safe for users, passers by and surrounding property.

Compliance – ensure practice net design or net materials meet recommended standards.

Accessibility – ensure that cricket nets are accessible for all users.

Game development – ensure cricket net design promotes player skill and overall game development.



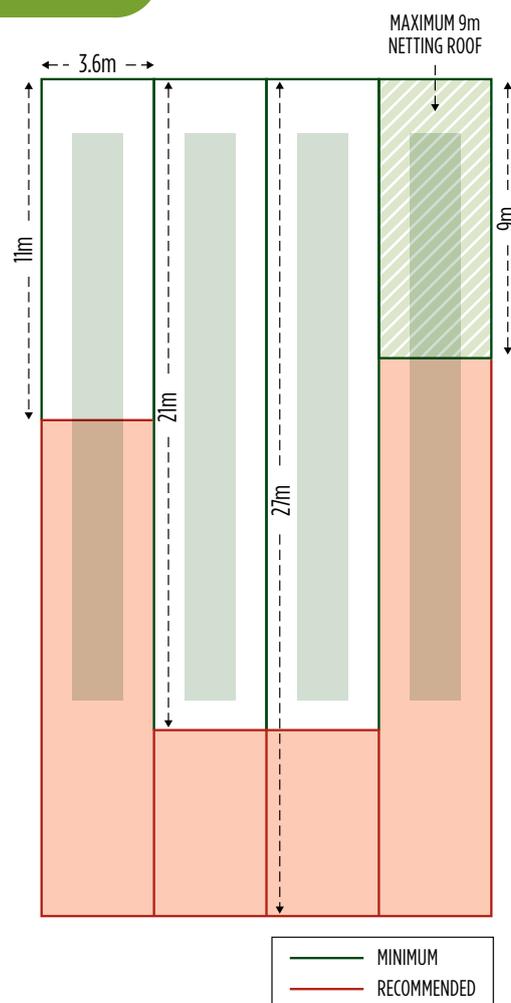
AS1725.4 – 2010: Chain link fabric fencing – Cricket net fencing enclosures provides the Australian Standard for fencing of cricket net enclosures, including use of materials, design footings and installation requirements.



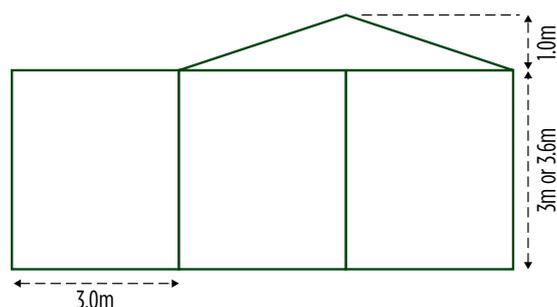
For occupational health and safety measures, it is a requirement that the dividing (centre) net within all multi bay constructions be of minimum length of 21m for the protection of bowlers in adjacent nets. Peripheral nets require a minimum side fencing length of 11m. However it is recommended that all nets have a minimum 21m dividing fence and a desirable length of 27m to allow for extended bowler run-ups and bowler protection.



Cricket training net development may require a building or planning permit. Consult with your Local Council first to understand if there are any specific permit requirements or local planning conditions in place.



An example of minimum and recommended dimensions for a standard cricket net facility.



An example of a side profile of a standard pitched roof cricket net facility and heights as specified in AS1725.4 – 2010.



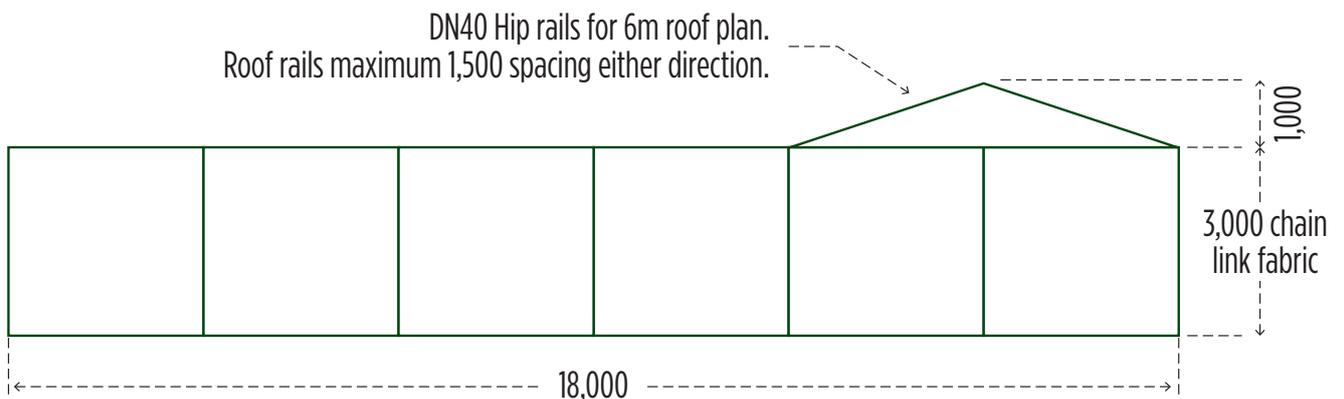
The adjacent image provides an example of the Australian Standard 9m netting roof length. It also demonstrates a design option for minimising the impacts of errant balls travelling over the roof of the net and damaging neighbouring property and/or passers by.

Dendy Park, Brighton (VIC)
Image courtesy of insideEDGE Sport and Leisure Planning



The adjacent image provides an example of a fully enclosed and roofed training net facility with ball control measures in place to prevent balls exiting the practice area into neighbouring parkland.

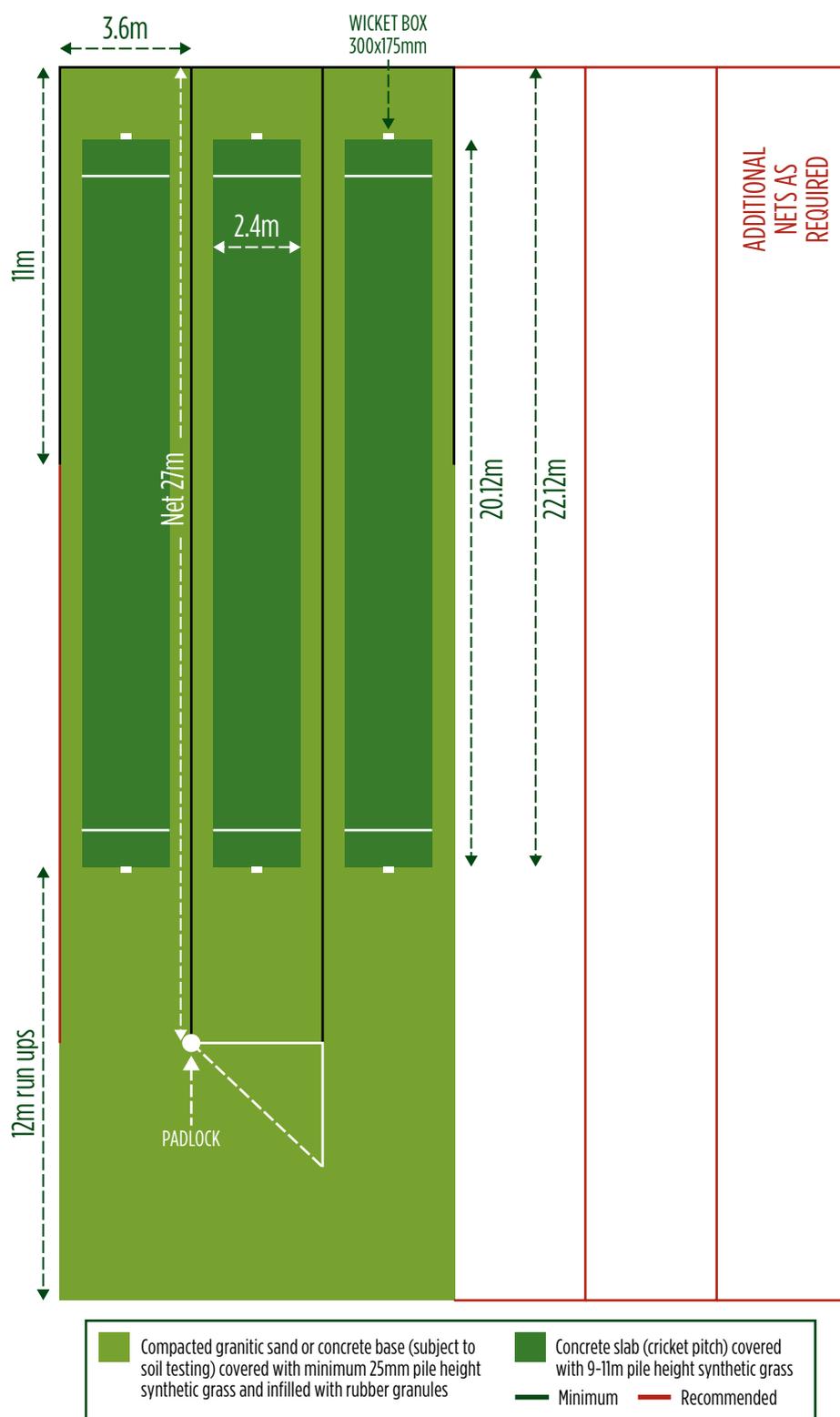
Caulfield Park, Caulfield (VIC)



Typical two pitch cricket net fencing enclosure Type B with pitched roof design.

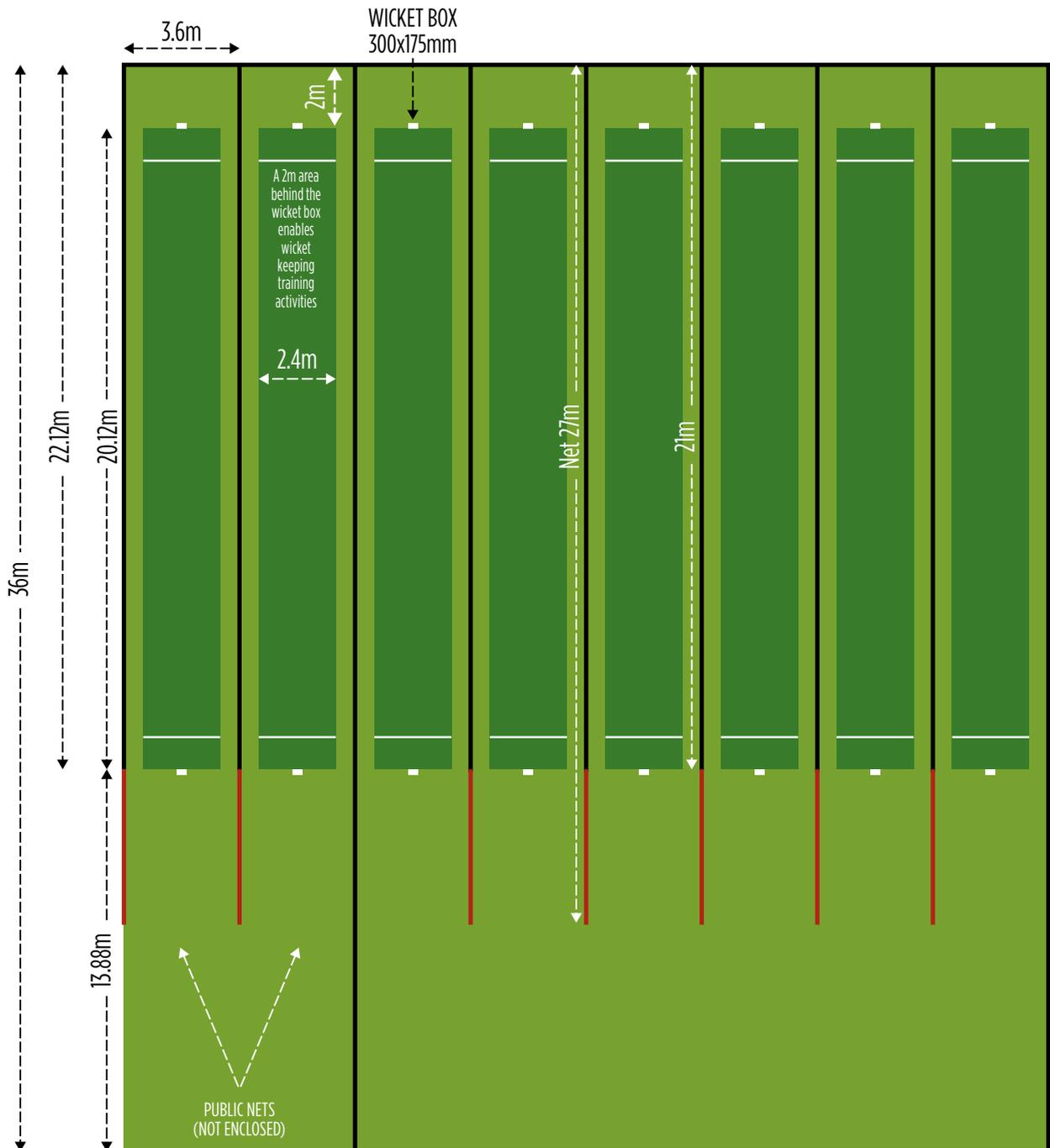
CRICKET ONLY SYNTHETIC PRACTICE PITCHES (NOT ENCLOSED)

The diagram below outlines the area requirements and recommended design to develop a new non-enclosed cricket net training facility. The design also includes extended synthetic bowler run-ups and a lockable gate.



Although public access is promoted, Councils/Clubs may wish to lock one or multiple nets which will require a lockable gate at the bowler's end. The gate would cover the width of the bay when locked or secured. When in use the gate can be drawn back and secured, which in turn will act as the extension for the dividing net as displayed in the above diagram. It is recommended gates have a long lockdown bolt for padlocking.

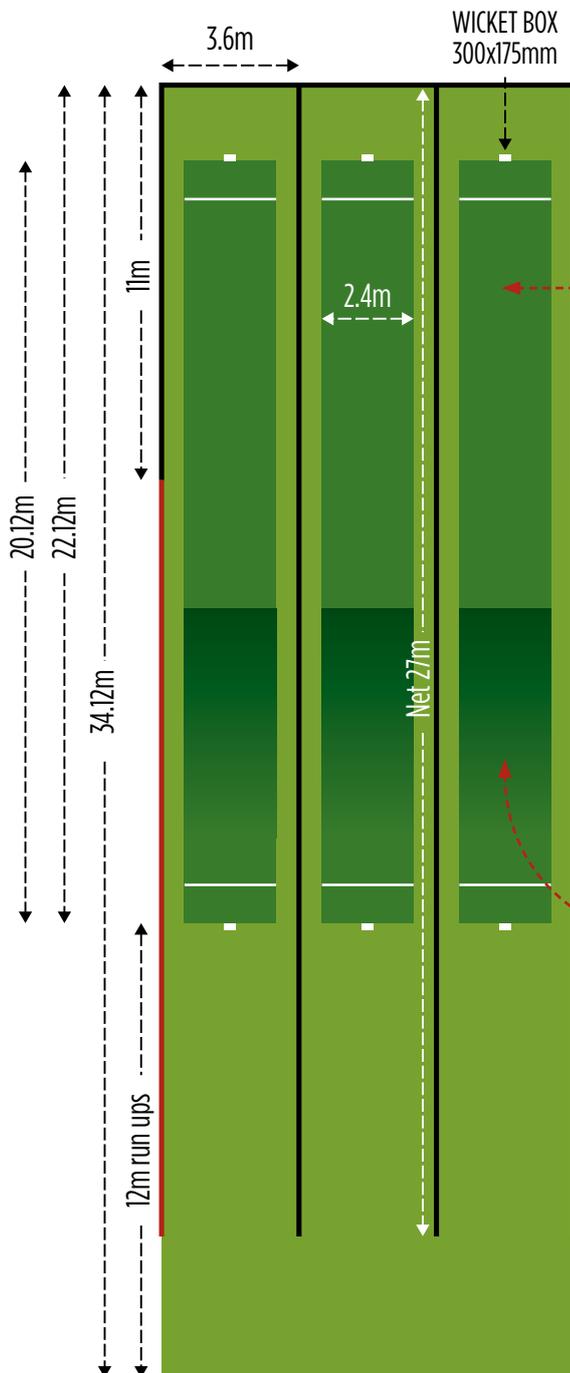
CRICKET ONLY SYNTHETIC PRACTICE PITCHES (ENCLOSED)



- | | |
|--|--|
|  Compacted granitic sand or concrete base (subject to soil testing) covered with minimum 25mm pile height synthetic grass and infilled with rubber granules |  Concrete slab (cricket pitch) covered with 9-11m pile height synthetic grass |
|  Minimum |  Recommended |

REDEVELOPING SYNTHETIC CRICKET PRACTICE PITCHES

This design option provides a recommended approach to redeveloping 'disconnected' (gap between batting and bowling concrete pads) synthetic pitch training nets to improve player safety, general playability and suitability. It also includes extended synthetic bowler run up provision.



Infill previous safety and maintenance hazard area with compacted granitic sand and 25mm pile synthetic grass.



Join existing batting and bowling concrete pads through installation of additional concrete and relay new 9-11mm pile synthetic surface over entire pitch area (20.12m).

Space permitting (without encroaching on playing field), extend bowler run up areas to allow for an additional 12m from bowling crease.

- | | | | |
|---|--|---|---|
|  | Compacted granitic sand or concrete base (subject to soil testing) covered with minimum 25mm pile height synthetic grass and infilled with rubber granules |  | Concrete slab (cricket pitch) covered with 9-11mm pile height synthetic grass |
|  | Minimum |  | Recommended |

TURF TRAINING NETS

Turf training nets are an integral element to simulating centre pitch conditions and playability and important to clubs and teams participating in turf pitch competitions.

Each turf training net should be separated by adjustable soft netting. Unlike synthetic training nets, turf nets can be located on the ground at the extremities of the oval or off the ground with the run-ups being on the ground.

Fabric netting is more appropriate for turf training nets to allow for flexibility and ease of maintenance. Netting should extend beyond the bowler's point of delivery in each net to minimise risk of injury.

For any new developments it is recommended turf training nets be located totally off the ground with mesh wire fencing on the end and sides but open at the bowlers end. A nearby storage facility for equipment and bowling machine is also recommended.

Turf training nets should have a north-south orientation with an ideal rotation of 15 degrees east of north and maximum rotation of 30 degrees east or west of north.

The recommended length for turf training pitches is 22m. This distance includes the pitch length from stump to stump (20.12m), the bowling crease (1.22m – one end only) and some space at the rear of the stumps at the batsman's end. This length can be extended to allow for greater room at the rear of the stumps at both the batsman and bowler's ends if required.

Adding 2-4 synthetic cricket pitches adjacent the turf training areas is advantageous as it enables clubs to use the synthetic pitches as an alternate training facility if the turf pitches are underprepared or have been impacted by wet weather.



Drummoyne Oval (NSW)

Image courtesy of insideEDGE Sport and Leisure Planning

4-6 turf training nets are preferred for local club turf cricket competition. 8-12 pitches are recommended for premier or regional level cricket.



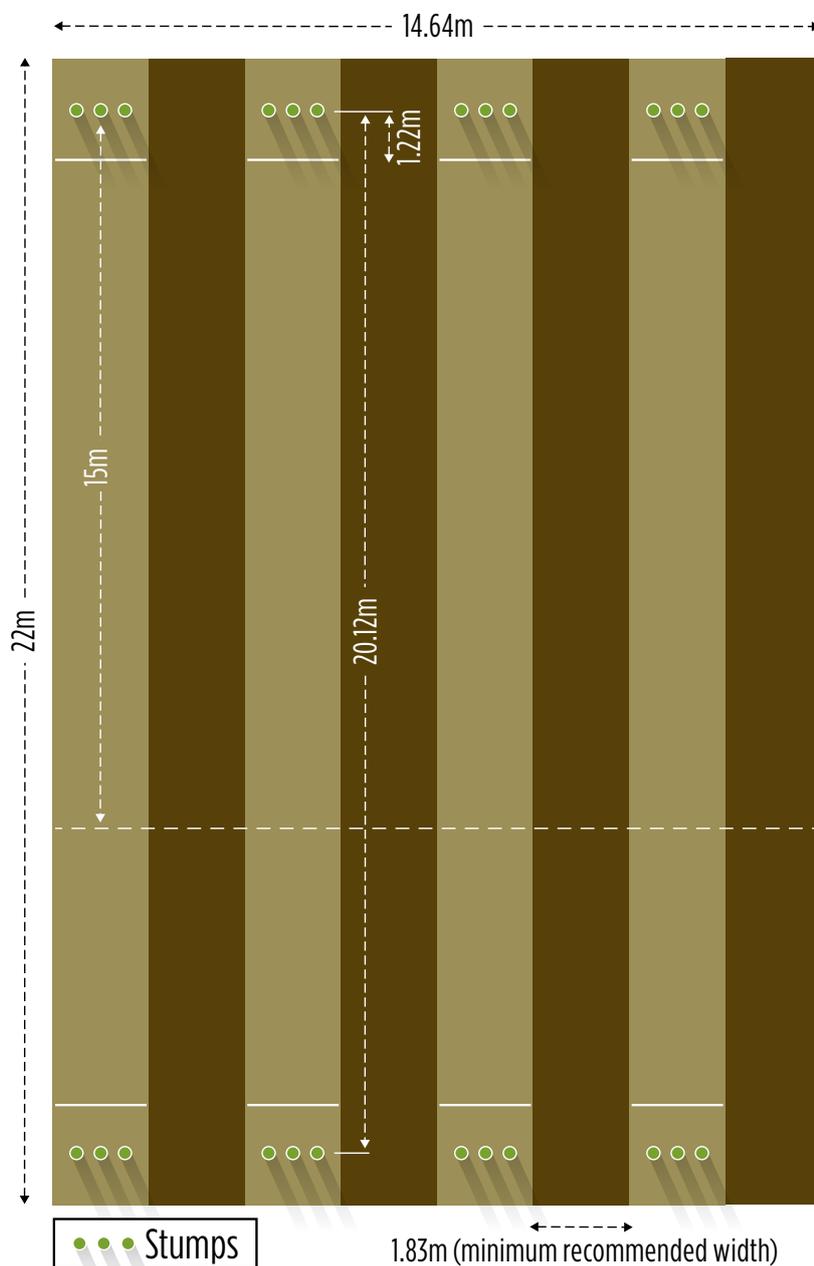
Williamstown Oval (VIC)

Image courtesy of insideEDGE Sport and Leisure Planning

Combined turf and synthetic training nets enable greater training flexibility.

TURF TRAINING NET DESIGN

The diagram below outlines the area requirements and recommended design to develop a turf training net facility.



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.



Soft training net storage units provide a lockable and secure location for netting when not in use. They also enable quick and easy set up and pack down of training nets.



Using alternate pitches at any one time enables turf recovery and preparation whilst pitches are not in use.

COMMON TRAINING NET DESIGN ISSUES

Divided bowling and batting concrete pads create an unsafe environment for bowlers completing their follow through and limit the ability for delivery of a 'short ball'.



Example of poor quality and unsafe infill materials
Image courtesy of insideEDGE Sport and Leisure Planning

Grass surrounds create a maintenance issue and detract from user experience. Overgrown grass also impacts pitch area and can deteriorate synthetic surfaces prematurely.



Example of poor quality and unsafe infill materials
Image courtesy of insideEDGE Sport and Leisure Planning

Tree debris falling on the pitch can also create risk management issues as well as damaging pitch condition through build up of mould and algae if not maintained correctly.



Evidence of leaf litter and tree debris falling on practice pitch area
Image courtesy of insideEDGE Sport and Leisure Planning

Flat roof designs can suffer from net sag as a result of people climbing on top of nets to retrieve balls.



Example of damage to a flat roof net design
Image courtesy of insideEDGE Sport and Leisure Planning



Overhanging trees can create shadows over the pitch and interfere with the batsman's vision.

Example of inappropriately positioned vegetation
Image courtesy of insideEDGE Sport and Leisure Planning

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.

They also ensure investment into community facilities provide benefits outside of summer cricket training.

Significant interest has been identified for multi-use training facilities with many design related projects underway across the country.

A typical range of multi-use training facilities developed to date include configurations that accommodate training for cricket-netball, cricket-baseball, cricket-soccer, cricket-lacrosse, cricket-hockey and cricket combined with general training and pre-game warm-up for other codes including rugby and Australian Rules Football.

The principles of cricket net design can be integrated within multi-use facilities including safety, compliance, accessibility and game development. Where multi-use facilities can demonstrate adherence to these principles and still provide fit-for-purpose cricket training nets that are flexible for other activities, then Cricket Australia will support these innovations.

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, along with the proposed staged planning process identified in **Section 1** be utilised to ensure maximum benefit can be achieved for all.

A number of **Case Studies** are provided in **Section 3** that highlight a range of multi-use training facilities.



ADDITIONAL AMENITIES TO SUPPORT PRACTICE PITCHES

Power supply

A nearby power supply to outdoor training nets enables the operation of an electronic bowling machine. Bowling machines typically operate on 240 volt power requirements but always check machine requirements with the manufacturer before installing power. Be mindful that electric cords do not become trip hazards and ensure they avoid contact with water.



Important to have netting barrier to protect the ball feeder

Training net storage

Internal turf training net storage units provide a lockable and secure location for netting when not in use. They also enable quick and easy set up and pack down of training nets.



Example of retractable training net storage unit
Image courtesy of insideEDGE Sport and Leisure Planning

Rubber net edging

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



Example of rubber material for netting
Image courtesy of insideEDGE Sport and Leisure Planning

Storage facility

A storage facility in close proximity to playing field and training facilities enables easier set up and pack down of equipment as well as a secure storage location for training and match day equipment. It can also act as a functional and elevated base for a match day scoreboard.



Storage shed with combined scoreboard at Williamstown Oval (VIC)
Image courtesy of insideEDGE Sport and Leisure Planning

Access to water

Access to a nearby water supply is recommended for turf practice pitches to assist with pitch development and ongoing maintenance.