



# ***GUIDANCE NOTE 04***

## **INDOOR TRAINING FACILITIES**



**CRICKET**  
AUSTRALIA

# GUIDANCE NOTE 04

## 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

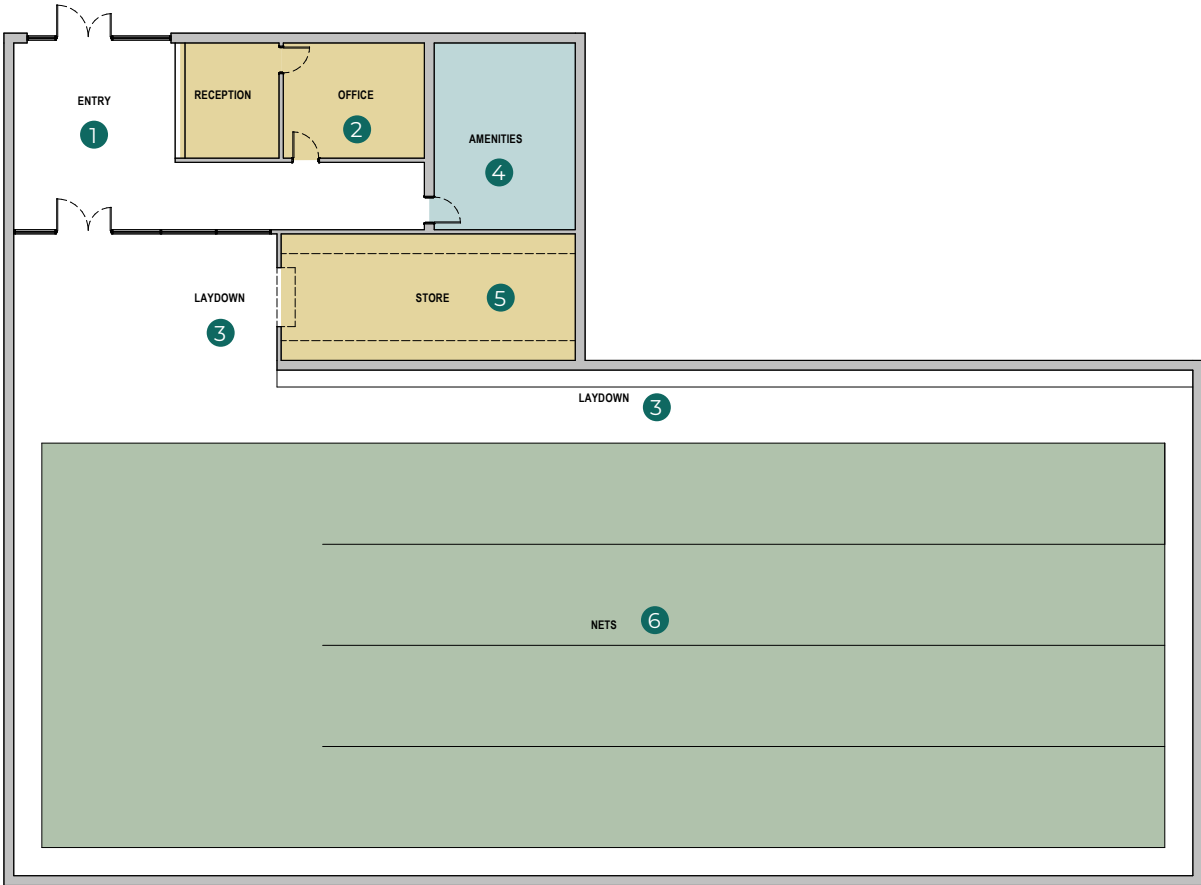


## Venue attributes

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
<b>ENTRY / RECEPTION</b> 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 style="list-style-type: none"><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>
<b>OFFICE</b> 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 style="list-style-type: none"><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>
<b>KIT BAG LAYDOWN / SHELIVING / STORAGE</b> 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 style="list-style-type: none"><li>A typical senior kit bag will require 1sqm 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>
<b>AMENITIES</b> 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 style="list-style-type: none"><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>

<b>EQUIPMENT STORAGE</b> 5	Internal storage rooms should be designed with shelves to maximize storage room capacity. Storerooms should be located internally within the facility.  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 an indoor training facility.	<ul style="list-style-type: none"><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><li>Storage areas and their access should be located outside the netted training area but have easy access to the netted space.</li></ul>
<b>TRAINING NET AREA</b> 6	Refer to following training net layout and related dimensions.	<ul style="list-style-type: none"><li>The minimum number of training lanes recommended for an indoor training facility is four, however additional 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.</li></ul>



# 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.



Circulation space adjacent to netting  
Image courtesy of Cricket Victoria



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 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.

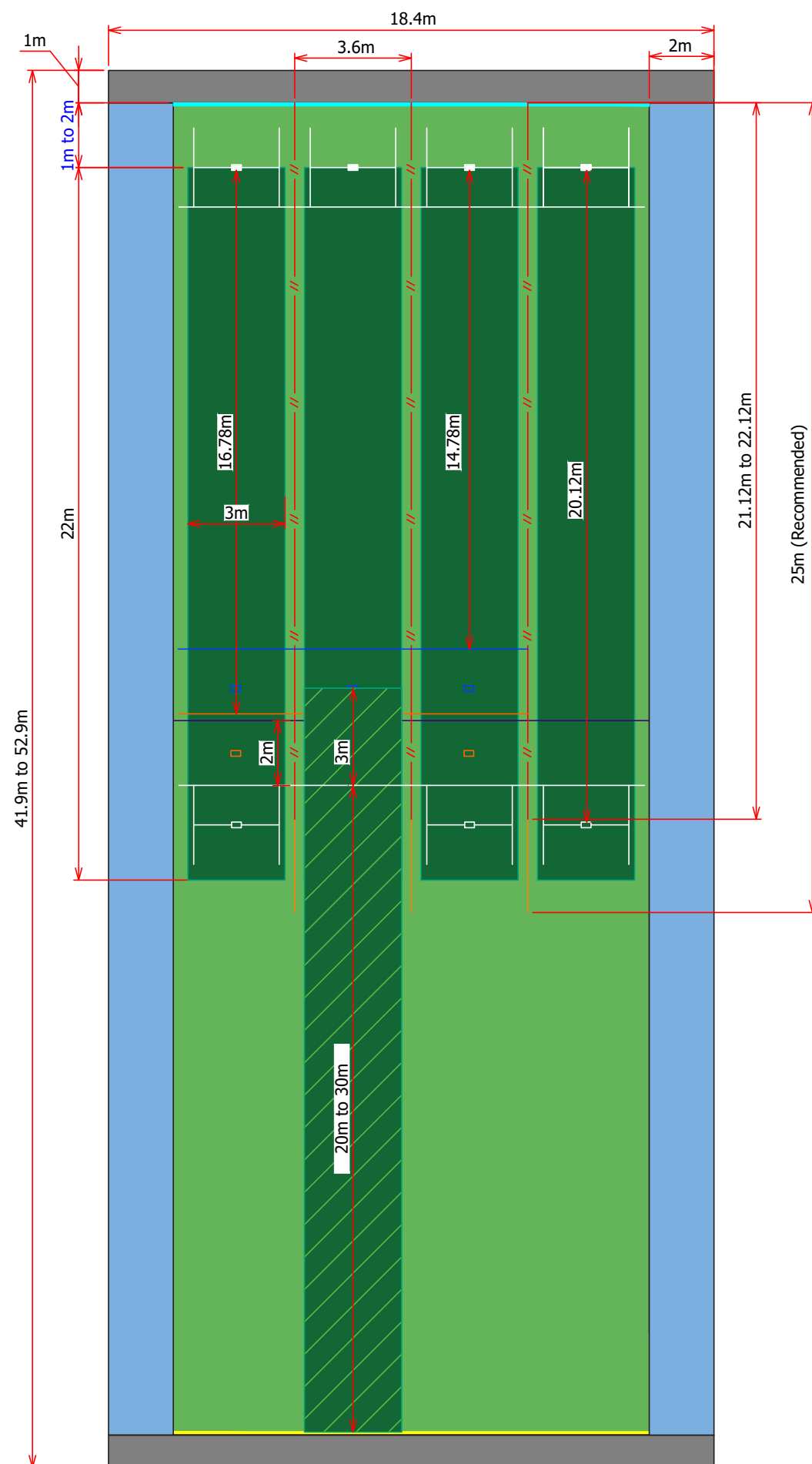
ITEM	MEASUREMENT	NOTES
Circulation space / safety margin (rear of netting)	1m	<ul style="list-style-type: none"><li>Adequate offset and circulation space beyond the net is required to protect spectators/non-users of the nets from coming into contact with a player and/or ball impacting/striking the net.</li></ul>
Circulation space / safety margin (side of netting)	2m	<ul style="list-style-type: none"><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	1m-2m	<ul style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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)	<ul style="list-style-type: none"><li>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.</li></ul>
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 style="list-style-type: none"><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 style="list-style-type: none"><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

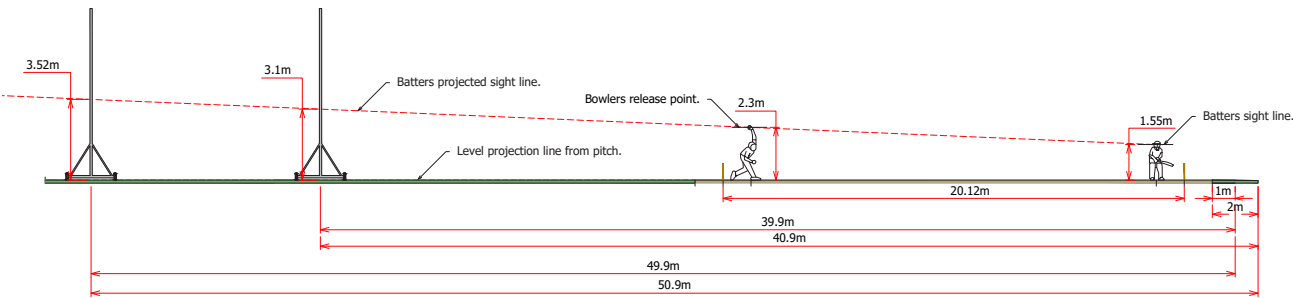


Image courtesy of Cricket Victoria

## 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	■ International (M) ■ Domestic (M)	1500
II	■ International (F) ■ Domestic (F)	1000
III	■ Premier Senior — 1st & 2nd XI (M) ■ National Youth Championships (U/ 19 M)	750
IV	■ Premier Senior (F) ■ Premier Senior — All other (M) ■ National Youth Championships (U/ 19 F) ■ National Youth Championships (U/ 17 M) ■ National Youth Championships (U/ 16 F) ■ Community Senior (M) ■ Premier Junior (M&F) ■ Junior Cricket Stage 3 (M)	500
V	■ Community Senior (F) ■ Junior Cricket Stages 1, 2 & 3 (F) ■ Junior Cricket Stages 1 & 2 (M) ■ Cricket Blast (M&F) ■ Schools Programs (M&F)	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.