

# Football South Australia Procedures and Policies

Subject:	Flood Lighting Requirements	Date Implemented	December 2016
Review:	Biennially	Date Amended:	August 2023

#### 1. Rationale

- 1.1 This policy sets out the mandatory requirements for competition lighting at football venues used by clubs competing in competitions administered by Football South Australia or affiliated to Football South Australia.
- 1.2 These requirements ensure that clubs are compliant with the Australian Standard AS 2560.1:2018, AS 2560.2:2021, AS 4282:2019 and applicable Occupational Health and Safety requirements. Implementing a minimum standard of lighting also aids a higher quality of play, providing a positive experience for participants and spectators. Applicable lighting should also ensure that football venues are "good neighbours" in residential areas.

#### 2. Background

- 2.1 The International governing body for football, the Federation Internationale de Football Association (FIFA), has developed technical recommendations and requirements for Football stadiums but do not mandate specific lighting standards for competitions of the type administered by Football South Australia. In this regard, Football South Australia adopts the Sports Lighting Australian Standards.
- 2.2 Football South Australia requires that all clubs comply with Australian Standard AS 2560.1:2018, AS 2560.2:2021, AS 4282:2019 that applies to football (soccer). These Standards outline the lighting requirements for different levels of competition of play and training. Football South Australia supports and encourages clubs to expand their spectator base by conducting games under lights and provide participants with the opportunity to compete under different conditions. Compliance with the AS Standards herein is a precondition of approval of night fixturing.

### 3. Requirements

- 3.1 The requirements detailed below are applicable for all Football South Australia Sanctioned Games and Affiliated Associations. This document is to be read in conjunction with the Football South Australia Competition Rules and Regulations. The requirements are mandatory for matches to be played under lights.
- 3.2 These standards are the **MINIMUM** required. Football South Australia encourages achievement of higher lighting levels, where possible.
- 3.3 The Australian Standard identifies several levels of competition and specifies lighting standards for each. The levels are:

- amateur.
- semi-professional.
- professional.

These levels align with Football South Australia's Competition Operating Regulations, which specifies the requirements for each competition. Football South Australia has deemed that only one league, the National Premier League (NPL) is classified as semi-professional, with all other competitions deemed to be amateur.

3.4 The table below outlines the Australian Standard for sports lighting, detailing the minimum requirements for competition, including both minimum lux levels and minimum horizontal uniformities.

Soccer - AS 2560.2.3

Soccer - AS 25	00.2.3	1		Т	Ι		
Category	Average horizontal maintained illuminance	Minimum horizontal uniformity		Maximum uniformity gradient	Maximum glare rating		
	Eh lux	U1Min/Avg	U2Min/Max	UG (per 5m)	GR		
Amateur Level							
Ball and physical training	50	0.3	N/A				
Club comp and match practice	100	0.5	0.3	2	50		
Semi-professional Level							
Ball and physical training	50	0.3	N/A				
Club comp and match practice	100	0.5	0.3	2	50		
Semi- professional comp	200	0.6	0.4	1.67	50		
Professional Level							
Ball and physical training	100	0.5	0.3	2	50		
Club comp and match practice	200	0.6	0.4	1.67	50		
Professional comp	500	0.7	0.5	1.33	50		

N.B. the minimum Lux refers to the maintained average as actually measured in field audits, not the levels provided for in design documents.

- 3.5 Lighting installations should be designed with minimum obtrusive light to ensure that no disturbance or discomfort is caused to neighbouring properties and residents, or spectators. In making this determination, the following should be taken into consideration:
  - light falling on vertical surfaces or entering a property via windows etc.,
  - the brightness or intensity of the installation from specific observer positions looking toward the installation,
  - The light emitted upward (above horizontal) from each floodlight. This effect is often referred to as "sky glow,"

Such occurrences should be addressed as soon as practicable.

## 4. Sanctioning of Night Games - Process

Where a club wishes to schedule a match at times where lighting is required, the club must ensure that the lighting has been certified to the Australian Standard AS 2560.1:2018, AS 2560.2:2021, AS 4282:2019.

This Certification must be based on an audit of the lighting system by a suitable consultant. The lighting consultant must be confirmed as suitable to Football South Australia in advance of the audit being conducted. Suitability is based on the qualifications and experience of the consultant in floodlighting for sports purposes, especially football. Suitable lighting consultants will include but are not limited to Members of the Illuminating Engineering Society of Australia and New Zealand Limited (IES - The Lighting Society).

The cost of gaining this certification is the responsibility of the club.

#### 5. Club Lighting Audit Requirements

- 5.1 A club undertaking a lighting audit is required to have the lighting consultant complete the following requirements:
  - undertake a review of the installed equipment to assess its characteristics and current potential for compliance with the Australian Standard.
  - undertake an on-field audit using appropriate equipment measuring in accordance of the Australian Standard AS 2560.1:2018, AS 2560.2:2021, AS 4282:2019 and assess compliance with the lux levels and their uniformity.
  - the tests must cover the entire field of play within the marked lines (tests across half field only is not acceptable).
  - identify any issues of concern regarding the uniformity of vertical illuminance affecting illumination of the ball on medium and high trajectory paths.
  - identify any issues of concern relating to the lighting system's reliability, including a check of the switchboard/lighting control systems to confirm that they are able to be fully secured and are in good working order.
  - report to Football South Australia on compliance with the Australian Standard or otherwise and any other matters affecting the performance and reliability of the system.
- 5.2 The lighting consultant's report to Football South Australia must include details of the installation, measurements obtained in the on-field audit and the calculation of

- maintained average lux, uniformities, and glare along with comments on uniformity of vertical illuminance and reliability.
- 5.3 Football South Australia will provide a prescribed form for the lighting consultant to complete which will provide space for the required information. The test readings must be attached to this form. The form must be completed and signed by the lighting consultant.
- 5.4 Certification is subject to satisfactory compliance with the Australian Standards for floodlighting. If Football South Australia is satisfied that the information and lighting performance meet the required standards, Football South Australia will register a venue as compliant for either semi-professional or amateur level matches to be conducted. Football South Australia reserves the right to seek additional information or testing from the club or lighting consultant, to be provided at the club's cost.
- 5.5 Certification will be accepted by Football South Australia for a period of **two years**, after which time another audit must be undertaken and Certification provided for the club to continue to conduct matches at times requiring lighting. Football South Australia will not approve fixtures that require lighting without the Certification and subsequent Football South Australia registration of the venue.

#### 6. Ongoing compliance

- 6.1 If a club becomes aware that the lighting may have deteriorated below the Australian Standard it must immediately notify Football South Australia in writing, whereby Football South Australia may be required to amend fixtures if the club is unable to bring the lighting up to the required standard. The club will be required to provide Football South Australia with a new lighting certification prior to the sanctioning of future night games.
- 6.2 Where a referee has made a report in relation to the adequacy of the lighting at a venue and/or Football South Australia has concerns that a venue may not currently meet the Australian Standard, Football South Australia may direct the club to engage a suitable lighting consultant to undertake a field audit to test compliance as detailed above. Any cost will be met by the club.
- 6.3 If a match is unable to commence, is halted temporarily or abandoned due to the failure of the lighting the club must provide a report and evidence to Football South Australia as to the causes of such failure. If the failure was due to circumstances beyond the control of the club, such as network system failure, weather, accidental damage or offsite equipment failure or any other extraordinary circumstances accepted by Football South Australia, the outcome of the match will be determined in accordance with the Competition Rules and Regulations and subject to Football South Australia being satisfied that the lighting still meets the Australian Standards, the club may continue to play night games.
- 6.4 If the Lighting Failure was due to any other reason:
  - (a) The match will be determined in accordance with the Football South Australia Competition Rules and Regulations, and the specific Competition Operating Regulations.
  - (b) The club will be required to undertake a further audit in accordance with the lighting audit requirements outlined above, at the cost of the club; and
  - (c) The club will not be permitted to hold night matches at the venue until an audit

demonstrates compliance with the Australian Standard.

6.5 If a Lighting Failure occurs on a second or subsequent occasion within two concurrent seasons for any reason, the Football South Australia in its sole and absolute discretion may not accept the relevant venue for further night fixtures.

Signed:

Signatures:

Signed: ZRbown

Football South Australia President

Football South Australia CEO

Next policy review date is: July 2025