Floodlighting for Football Pitches

Planning and Cost: Artificial grass pitch construction generally incorporates floodlights in order to maximise the use of the pitch. Floodlighting can be an expensive part of a pitch project (sometimes as much as a quarter of the cost) and should be properly researched. Planning permission is generally required and applications should incorporate contingencies for minimising glare and light pollution.

Lux Levels: Where no requirements are stated the minimum levels of performance should be in accordance with FIFA’s Class II which, for 11 a side football, is a minimum maintained average illumination of 200 lux. Artificial grass pitches designed for multi-sport should ensure that their proposed lighting considers the needs of all the various sports to be played.

Hockey requires a minimum maintained average illumination of 500 to 750 lux depending on level of play. For MUGAs where football is the primary sport and hockey is secondary a minimum level of 350 lux may be used.

Care must be taken to ensure that the lighting design produces uniformity of the required illumination and that glare and light pollution are minimised.

Lighting of full size pitches is normally achieved by 2 or 3 lamps mounted onto a 6 or 8 column system (15m or 16m high) which is positioned along the side of the pitch outside the fence-line. Columns may be hinged for ease of maintenance. A unit is required to house the controls and a 3-phase supply may be required.

To minimise running costs and for flexibility of use, the lighting system should allow part illumination of the pitch (half pitch and/or thirds) and a lower level of lighting for training (minimum maintained average illumination of 120 lux).