

TECHNICAL INFORMATION SHEET NUMBER 8

February 2014

SQUASH COURT LIGHTING

REQUIREMENTS

Natural lighting in the form of windows or roof lights is not acceptable.

The basic requirements for the provision of squash court lighting are as follows:

1. The recommended minimum standard of 400lux is required for recreational play (when measured at 1000mm above the floor) and 500lux for competition play. If play is to be televised, the requirement is 1200lux.
2. Light fittings able to withstand ball impact.
3. Lighting to be free of stroboscopic effects.

EXISTING COURTS

1. Tungsten fittings in the form of a large diameter metal reflector with a screw in or bayonet pattern lamps are not considered as being suitable for lighting a squash court.
2. Early pattern fluorescent fittings with bayonet end caps are now obsolete.
3. Newer fluorescent fittings with high frequency Xtra long life tubes will avoid costly maintenance when replacing tubes. This type of fitting should comply with Building Regulations L1. (Energy saving only).
4. Fittings along the length of the court, normally two on each side are fixed parallel to the side walls.
5. Fittings facing the front wall should be angled and have open ends to enable light to spread to the side walls.
6. Fittings are 1200mm or 1500mm long and are fitted with two tubes. One fitting may have integral emergency lighting if required by the Local Authority.
7. Light output is subject to the reflectance of the ceiling, walls or floor. Where coloured courts are used, the average lux may be reduced and additional lighting may be required.
8. Fittings with exposed tubes should have wire guards fitted or have polycarbonate clear diffusers.
9. Recessed fittings in a suspended ceiling with a clear polycarbonate diffusers which project below the ceiling line may reduce the spread of light to the side walls. Additional fittings may be required and you should seek advice from the fitting manufacturer.

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10. For new courts or major refurbishments of existing, fittings using LED lamps are available. However, the initial cost may be higher than conventional fittings but Manufacturers claim a reduction in running costs and a longer life for the LED lamps. This type of fitting has been installed in Squash Courts and the initial reports say that they are satisfactory and give an even spread of light over the complete floor area. LED lamps are available in a variety of colours Kelvin rating, colour temperature. 4000K is recommended for use in squash courts.

11. All types of fittings require regular cleaning to remove a build up of dust and dirt which is inevitable in a squash court.

12. Where a glass back wall is in use, with either fixed or removable seating, the light levels in these areas outside the court should be provided to the same standard as the court. If the lighting is of a lower standard to the spectator side of the glass wall, the back wall will act as a mirror for the players. For this reason, the walls and ceiling surfaces outside the should be painted a light colour.

13. The floor surface for a distance of 900mm behind the glass wall should be the same colour or lighter than the floor of the court. The provision of dimmer switching to the light fittings in the spectator areas will allow the lighting to be reduced but care should be taken not to allow the glass wall, when viewed from the inside the court to act as a mirror.

14. Changing tubes and cleaning fittings is a task that should be carried out on a regular basis.

15. Check that all tubes are working correctly on a regular basis, a faulty tube will reduce the light output from that fitting.

16. Manufacturers of fittings suitable for squash courts will be able to offer advice and details of fittings to meet the requirement for squash court lighting.

Philips

Thorn Lighting

Cooper Lighting & Security (Crompton Parkinson)

Fitzgerald Lighting

Also available:

Apollo Lighting Ltd, Leeds. - The Squash Corso fittings, using 55W PLL compact fluorescent 4000K lamps with high frequency gear in fittings with polished aluminium reflectors achieving 500+ lux over the court area.

On a new installation, check with the Local Authority or Fire Officer, if emergency lighting is required in the event of a power failure.

Please note that the information for the maintenance and provision of squash courts contained in the England Squash Technical Information Sheets apply to courts built in the United Kingdom only.

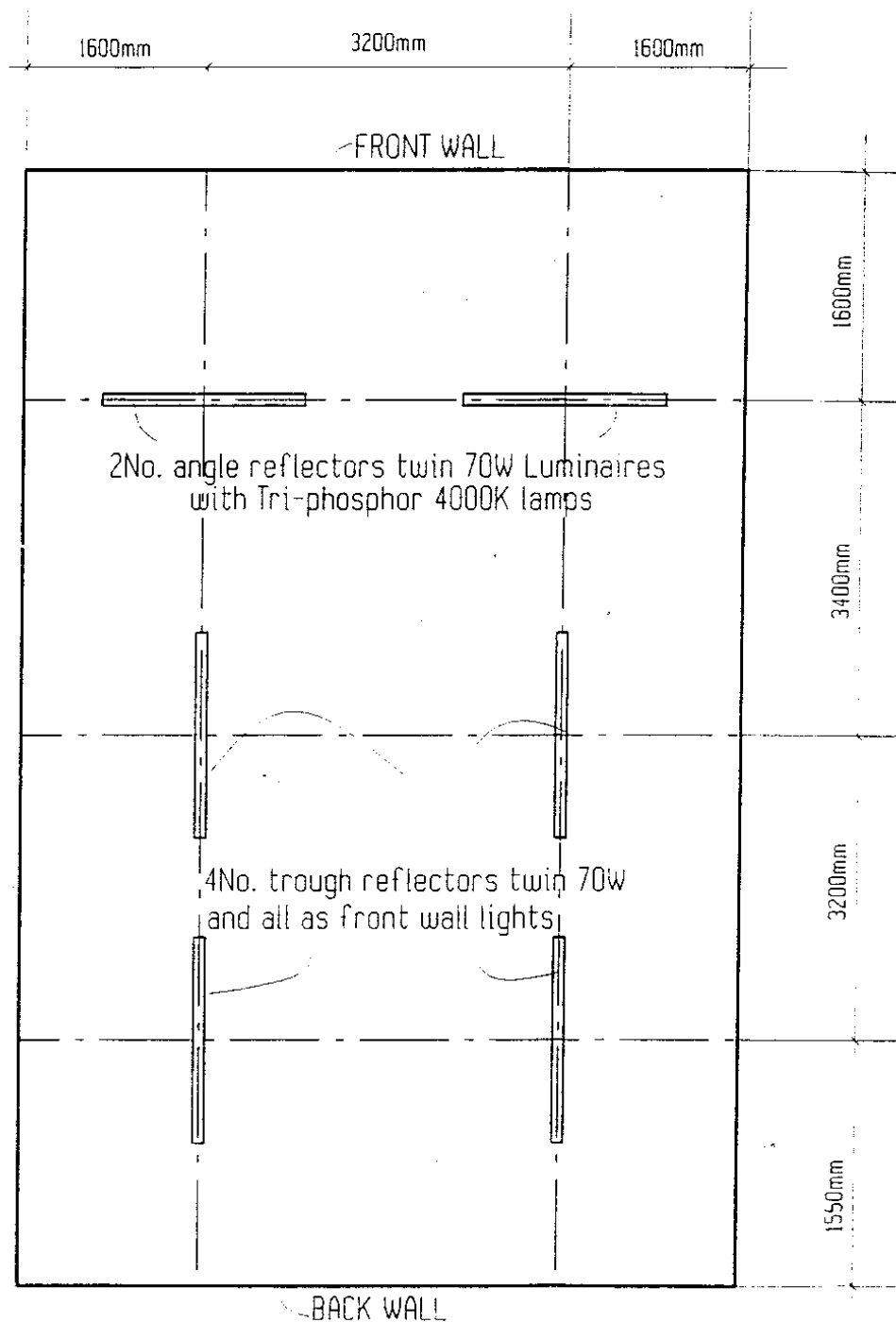
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SINGLES COURT LIGHTING LAYOUT

Using standard high frequency fittings with wire guards



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DOUBLES COURT LIGHTING LAYOUT

Using standard high frequency fittings with wire guards

