### (INSERT COUNCIL)

#### Theatres Act 1968

Licent	ce in respect of the premises describe	notice of my intention to apply for a Theatre ed in the form of application below, and I* days from the date hereof to consider		
SIGNE	ED	DATE		
Licer * 28 da * 14 da	nce	cation is for the Grant or Transfer of a cation is for the renewal of a Licence cation is for one or more particular		
Applic	cation for a Licence for the Public Per	formance of a Play [Note (i)]		
1.	Name of applicant (in full)			
2.	Address of applicant			
		Post Code		
3.	Telephone number: (Home)	(Work)		
4.	Description and full postal Address of premises to be Licensed [Note III]			
5.	If the premises are not open at all times please indicate the name and address of the person responsible for the keys to the premises.	Name		
	Tel. No	Post Code		

6.		of Licence [Note (iv)] as applicable OC	ANNUAL * CASIONAL * see below			
	(i)	Period exceeding 3 weeks,	commencing	_ending		
	(ii)	Complete week or part	commencing	_ending		
	(iii)	One or more occasions total namely:	lling not more than 12 di	fferent days,		
7.	Nature of Licence:					
		GRANT, RENEWAL, TRANSI	FER, OCCASIONAL, PRO	OVISIONAL		
		NSFER, please state Name ious licensee, and date of er				
8.	Date when notice of intention was sent to Chief of Police [Note (viii)]					
9.	Survey structu	and address of independent or or Engineer whose ral report accompanies blication [noted (ix)]				
premis granted	es desc d I agree	ly for the grant*/renewal*/trar ribed above for the period st e to observe the conditions in licable)	ated. In the event of the	Licence being		
		ppropriate licence fee of £ UNCIL)).	(cheques sho	uld be made payable		
SIGNE	D		DATE	_		
When o	complete	ed, this form should be retur	ned to:			
(INSER	ensing C T COUN T ADDR	ICIL)				
Tel. No	. (INSER	RT TEL. NO.)				

ISSUE 1 LG/TH/L1 APRIL 1998

#### **ADVANCE NOTICE**

In accordance with the Council Policy to improve safety in places of Public Entertainment and like premises, it is now a requirement that an Electrical Test Certificate for both the installation and emergency lighting system is required on an annual basis – to be submitted with the grant/renewal application forms and fee etc.,

The Electrical Contractor should be one of the following:

- 1. Chartered Electrical Engineer
- 2. Member of the E.C.A.
- An NICEIC Contractor
- 4. Norweb

The Electrical Test Certificates required are:

- (1) The NICEIC Periodic Inspection Report for an Electrical Installations, together with the test results.
- (2) The NICEIC Emergency Lighting Inspection and Test Certificate.
- (3) Tameside MBC Statement of Electrical Safety this should be completed by the Electrical Contractor.

PLEASE NOT THAT IN ORDER FOR YOU APPLICATION TO BE PROCESSED WITHOUT DELAY, YOU SHOULD COMMENCE ARRANGING THE ABOVE FORTHWITH.

## THE CERTIFICATES REFERRED TO ABOVE MUST BE SUBMITTED WITH THE GRANT/RENEWAL APPLICATION

Failure to do so will mean that the application is not complete and, therefore, the Entertainment Licence will lapse and require attendance before the appropriate Committee. It will also mean that no entertainment can take place until a new licence has been granted.

## IT IS THE LICENSEE'S RESPONSIBILITY TO ENSURE THAT THE APPLICATION IS COMPLETE.

If you require any further information or assistance you should contact the Licensing Office on (INSERT TEL. NO.)

#### **Environmental Health and Bereavement Services**

**Licensing Section** 

### STATEMENT OF ELECTRICAL SAFETY

ADDRESS OF PREM	IISES						
I hereby certify that the Electrical Installation and Emergency Lighting systems at the premises named above have been tested in accordance with the latest edition of the I.E.E. Wiring Regulations and are found to be satisfactory and safe within the limitations specified on the NIC-EIC Periodic Inspection and Test Certificates for Electrical Installation and Emergency Lighting attached with this form All results from this test are found to be satisfactory and true.							
I understand that if I make a statement which is untrue I maybe liable to prosecution.							
Signature of Manager/ Chargehand			Date -				
Name (Block Capitals)		· · · · · · · · · · · · · · · · · · ·	Company Na	ame			
Position in Company			NIC-EIC Reg	g. No			
			Telephone N	Number			

Issue 1 LG/SOES/F1

### **NOTICE**

Will you please ensure that your electrician/
engineer receives this electrical specification
in order that the installation of emergency
lighting and the general electrical installation
will comply with the Authority's
requirements.

If you require any further assistance, do not hesitate to contact P Corcoran (Council's Electrical Engineer) on (INSERT TEL NO.).

# **Licensing Section**

**Electrical Specification for Places of Public Entertainment and Like Premises** 

Environmental Health Depot & Consumer Services Division Licensing Office (INSERT ADDRESS)

Tel: (INSERT TEL. NO.) Fax: (INSERT FAX. NO.)

## REQUIREMENTS FOR THE ELECTRICAL INSTALLATION IN ENTERTAINMENT CLUBS AND PREMISES REGISTERED UNDER THE FOLLOWING:

- Local Government (Miscellaneous Provisions) Act 1982
- Theatres Act 1968
- Cinemas Act 1985
- 4. Marriage (Approved Premises) Act 1995

The electrical installation shall conform to and be in accordance with this specification, the requirements of 'Guide to Fire Precautions in Existing Places of Entertainment and like premises' as issued by the Home Office (ref. ISBN 0 11 340907 issued 1990) the rules, regulations and requirements of the Supply Authority; the Fire Officer concerned; the appropriate British Standard Code of Practice; the recommendations laid down in the current edition of the Regulations for the Electrical Equipment of Buildings issued by the Institution of Electrical Engineers and the Health and Safety at Work Act. The installation shall pass the survey of their respective inspectors and be to the entire satisfaction of the Licensing Authority.

The Electrical Installation and Emergency Lighting System shall be inspected and tested at the time of application for licence and once each year thereafter by a competent Electrical Engineer who shall be the representative of one of the following:

- (i) a chartered electrical engineer;
- or (ii) a member of the Electrical Contractors Association;
- or (iii) be on the roll of Approved Electrical Installation Contractors issued by the National Inspection Council;
- or (iv) the Inspection Department of the Local Electricity Board.

In addition to the above requirement, the emergency lighting system shall be maintained, tested and inspected in accordance with the requirements of BS 5266 and the fire alarm system in accordance with the requirements of BS 5839. Log books must be kept for both systems and be available for inspection at any time, by the Licensing Officers of the Council.

The applicant for licence or licensee shall serve all notices for testing, pay all fees in connection therewith and any additional charge for re-testing. After each inspection and testing, three certificates – one for electrical installation, one for emergency lighting and a statement of electrical safety stating the condition of the electrical installation shall be forwarded to the Licensing Authority addressed to (INSERT COUNCIL), Environmental Health and Bereavement Services, Licensing Section, (INSERT ADDRESS).

#### **General Requirements**

Every part of the premises to which and for the time the public have access shall, unless it is adequately lit by daylight, be provided with means of adequate artificial illumination hereafter called the general lighting. The General Lighting shall at all times when the public are upon the premises be maintained in working order and capable of full illumination.

To prevent panic and facilitate ease of evacuation in case of emergency, the premises shall be equipped with an emergency lighting system which may normally be fed from the same source as the general lighting but in the event of failure of the general lighting will automatically switch to the emergency lighting source which shall be independent of the general lighting source. The time for the automatic change over shall not exceed the limits laid down in the latest edition of BS 5266.

In order to ensure that the levels of illumination laid down in BS 5266 are achieved within the parameters laid down therein, the overall level of illumination (both escape routes and general areas) as measured when initially switched on after installation shall be not less than 1(one) lux.

Clearly marked, unimpeded exit routes shall gain egress from any part of the premises. The routes shall be indicated with illuminated Exit Signs that are clearly visible from any part of the premises. The exit routes shall be clearly illuminated with both General and Emergency Lighting.

Lighting controls for the exit routes, all public area and toilets shall be located in a position out of reach and inaccessible to the public.

All fluorescent light fittings in Toilets, Public Access Routes and Public Areas shall be of the enclosed pattern.

All ring main circuits relating to the licensed area shall be protected by a 30mA suitably rated R.C.D. unit.

#### Stage Area

The stage area will have its own independent supply and isolating device. Sub-circuits to be wired in M.I.C.C. cable with screw on pots and seal terminations and protected by 30mA trip suitably rated R.C.D. unit and test button facility.

Mains supply to be wired in:

- 1. Steel wire armoured cable; or
- 2. M.I.C.C. PVC insulated cable

#### Position of electricity intake

The electricity service and main supply isolator(s) should preferably be at ground floor level and of easy access from the highway for ready emergency operation.

Wherever practicable, a separate switchroom should be provided or alternatively a cupboard or compartment constructed to one half hour fire resisting standard which is reserved solely for the control of electricity i.e. it should not contain any gas or water service, stores of

cleaners' materials. The access doors should also afford the same fire resistance as the compartment and be rendered self-closing or kept locked. The switchroom should not be within an undesirable area such as stage, heating chamber, fuel store, kitchen, toilet or any area of increased fire risk or area which is liable to unauthorised interference.

If there is not a suitable compartment reasonably near to an outside door, a shallow lockable cupboard constructed of fire resisting materials can generally be fitted in a recess behind the main entrance door.

\* The same principles apply to the position of the gas meter and the safety lighting battery and control cubicle, which should be within separated, ventilated but fire resisting enclosures to that of the electricity intake.

#### **General Electrical Installation**

The permanent electrical installation shall be one of the following systems:

- (i) Metal trunking or conduit with PVC insulated copper cable.
- (ii) Heavy duty, high impact plastic trunking or conduit with PVC insulated copper cables including separate PVC insulated earth cable.
- (iii) MICCS cables, PVC covered and screwed, spouted metal conduit boxes.
- (iv) PVC insulated/steel wire armoured cables.
- (v) PVC/PVC twin and earth cable protected by galvanised metal capping or high impact PVC conduit.
- (vi) Fire-tuff cable white PVC served.
- (vii) F.P. 200 cable white PVC served.

NOTE: PVC insulated cables with bare earth continuity conductor, PVC sheathed overall may be used for staff warning and oral announcement systems when the voltage does not exceed 'extra low voltage' as defined by Part 2 of the 16<sup>th</sup> Edition I.E.E. regulations and the cables are routed through protected areas of low fire risk.

In all cases, the system shall be uniform throughout any one complete installation. The trunking, conduit, cables and wiring shall be concealed wherever possible in the fabric of the building, due allowance being made for accessibility, inspection and maintenance. In any event, they must be out of reach of the public.

When metal trunking or conduit is buried in any building material that causes corrosion to standard finish then hop dip galvanised trunking or conduit shall be used. When PVC/PVC cable is used, all cabling buried in any building material shall be protected by galvanised metal capping or heavy duty high impact PVC conduit. The conduit to be locked solid into the switch, socket or accessory box.

All general lighting switches should be of the grid switch metal clad type. All power accessories (sockets, fuse spurs, etc.) should be of the metal clad type. All flush and surface back boxes should be of the metal clad type.

When MICCS cable is used in outside, damp or corrosive locations (buried in building material) then the MICCS cable to be PVC served. All MICCS cables shall be made off via screw on pot type seals contained with the compressive ring type gland.

Whichever system is used, the trunking, conduit or cables shall be securely fixed in accordance with the manufacturer's recommendations in addition to the recommendations laid down in the current edition of the IEE Regulations where applicable.

Where PVC/SWA/PVC cables are used as main or sub-main cables, all terminations shall comprise of compression glands of correct size for each cable and fitted with earth bonding washers, star washers and separate copper bonding to the earth terminal of the equipment. The whole gland assembly shall be fitted with a PVC shroud after the cable is fixed and earth bonded.

If calculations show that the armouring of the cable is insufficient to be used as the sole circuit protective conductor then a separate additional C.P.C. shall be installed. This may be in the form of an additional core of the cable or alternatively a separate conductor secured to, and in parallel with, the cable and connected to the earth terminal of the equipment.

All conduit and accessory boxes shall be fitted with a fixed earth terminal. All lighting points in all systems except trunking shall have metal conduit box fittings, two for fluorescent and one for tungsten wired in such a fashion that any lighting fitting may be disconnected and taken down without affecting the remainder of the wiring.

Lighting fittings fitted to trunking systems shall use manufacturers standard suspension units. Items of equipment intended for suspension, including signs, luminaries, trackline and such like shall preferably be supported by conduit or other rigid method of fixing.

Connectors shall preferably be of the porcelain type but approved heavy duty, fire resistant, moulded type having a temperature rating of 125°C may be used as an alternative. The flex integral to a lighting fitting shall be of the same cross section as the associated circuit cables unless separately fused. The flex for flex pendants or final flex connection shall have a cross section in accordance with the relevant table in the current edition of the IEE Regulations and be of the heat resistant type.

The supply to Decorative Ceiling Panel lights, stage and disco lighting and such like must be obtained from a socket outlet to BS 546 suitably fused fed from a lighting circuit located adjacent and the wiring of the panel from the socket outlet to the installation must be of a permanent nature. Temporary supplies must be taken from socket outlets suitably fused.

Where extra low voltage downlights are installed, they should preferable be of the type with its own integral transformer connected to the supply via a plug-in type ceiling rose. The luminaire lampholder shall be of the bayonet type. Where a separate transformer is installed it shall incorporate easily replaceable cartridge type fuses on the primary and one each of the secondary side circuits and be connected to the supply via a plug-in type ceiling rose and situated in an agreed accessible position. The maximum number of fittings connected to any one separate transformer shall be four and the maximum length of L.V. cable shall be 3 metres. The transformer shall be housed in a metal enclosure suitably ventilated. Termination to the luminaire from the transformer shall be via heat resisting cable and fixed porcelain connector, or cable clamp.

In general terms all fixed appliances or equipment shall be controlled by spur units, the spur unit to be fixed at an accessible position and the system extended to embrace a flex outlet plate adjacent to the appliances to afford minimum length of flex. All portable appliances or equipment shall be controlled from a socket outlet. All socket outlets used for stage equipment shall be controlled by a Residual Current Circuit Breaker. The wiring for different voltages and functions must be segregated from each other.

Fluorescent lighting fittings must be complete with totally enclosed control gear and covered end caps. Under no circumstances will remote control gear be permitted unless mounted in an enclosed fireproof container and the cables between the fitting and control gear be fixed in a permanent fashion.

All conductors feeding cold cathode and neon display units must be enclosed in a suitable dielectric so that it is impossible for any person to touch the high voltage electrodes. The transformers associated with cold cathode or neon equipment shall be housed in a fire resistant enclosure and mounted as near to the equipment as practicable in a readily accessible position yet still affording security from the public.

The transformer equipment shall be labelled in accordance with the requirements of the IEE Regulations.

The whole of the neon installation shall be controlled by a fireman's switch situated in an agreed position at the entrance of the premises. That part of the installation associated with the cold cathode or neon display lighting up to and including the operating transformers shall be in accordance with the IEE Wiring Regulations irrespective of the output voltage of the transformer. Where neon lighting is installed below 3 metres above floor level then the display shall be totally enclosed by a clear plastic sandwich type construction.

All wiring for closed circuit television is to be of the type appropriate for that duty, properly installed by a competent television engineer, be securely clipped at intervals not exceeding the recommendations of the TV cable manufacturer and run in a neat and orderly manner out of reach of the public.

All mains switches, section boards, distribution boards and their individual circuits shall be adequately labelled. A mounted and framed diagram showing the general arrangement of the electrical circuits shall be affixed in a position on the premises near the main switchgear.

BS3871 MCB fuses of the relevant type and current rating and BS88 cartridge fuses 2 + 6 of relevant type and current rating are the only overcurrent devices acceptable to the licensing authority for circuit conductors (BS3036 rewireables and pushbutton M.C.B.'s **WILL NOT BE ACCEPTED**).

There shall be no alterations or additions to the permanent electrical installation, which itself must comply with the requirements for licensed premises without first giving notice and receiving approval for the work from the Licensing Authority.

#### Failure of Lighting

Upon failure of the general lighting, an automatic, quick acting changeover to the emergency lighting source shall take place. The item for this changeover shall not exceed the limits laid down for changeover in BS5266 Part 1.

When the Central Battery mains fail alarm has sounded, the public shall be required to leave the premises.

When the public have been required to leave the premises in accordance with the aforementioned they shall not be again admitted until the general lighting or the emergency lighting, as the case may be, has been restored, made ready for occupancy and both the general lighting or the emergency lighting are in the correct state as they were at the time before failure occurred.

#### **Emergency Lighting System**

In addition to meeting the rules and regulations as specified for the General Electrical Installation the emergency lighting system shall comply with the requirements of BS 5266 part 1 and the emergency lighting system shall be designed to a level of 1 (one) lux.

The emergency lighting installation shall be carried out using:

- 1. M.I.C.C. cable (PVC served for outside installations); or
- 2. F.P. 200 white PVC served; or

#### 3. Firetuff cable white PVC served.

The requirements previously laid down in this document for the installation of this system shall apply.

The emergency lighting system and its enclosures shall be used entirely for that purpose and no other, it shall be completely segregated from any other system and where possible located along a route of negligible fire risk.

#### **Emergency Lighting Control**

To meet the aforementioned requirement that the emergency lighting is switched on at all times the public are on the premises and that the emergency lighting batteries shall be in a fully charged and working order before the public are permitted to enter the premises.

#### **Emergency Lighting Source**

The emergency lighting source shall be of the following:

A fully maintained 3 hours central battery system having lead acid plate, tubular or flat plate cells continuously tricklecharged from the electrical mains supply having an a.c. maintained output for use with luminaires/exit signs having tungsten or fluorescent lamps. The central battery shall be located in a well ventilated room specifically reserved for that purpose having ventilation from the highest point of that room to outside free air.

Attention is brought to the relevant clause in BS 5266 which refers to consultation between the owner and/or occupier of the premises, or his agent, and the enforcing authority.

The system shall be to the approval of the Licensing Authority and Fire Brigade before work commences on site and is dependant upon intended usage and size of the premises which dictates permissible numbers of people. In general terms the system be installed in all premises which have, or are applying for, an entertainment licence.

Specific requirements of the emergency lighting system are detailed in Appendix A of this document.

Diligent checks must be carried out by the Licensee to establish the correct functioning of the emergency lighting system before the premises are opened to the public.

Where the G.M.F.S. require premises to have a fire alarm system installed it must comply with BS 5839 part 4 1989 with the wiring carried out using MICC cable (red PVC insulated) installed as described elsewhere in this Specification.

There shall be no alterations or additions to the general electrical installation, the emergency lighting and fire alarm systems without first giving notice and receiving approval for the work from the Licensing Authority.

#### "Beer Cellar" Installations

The electrical installations associated with Beer Dispense Equipment shall generally be completed to meet the standard and requirements of "Code of Practice for Electrical Safety in Beer Dispense in Licensed Premises" as issued by the Brewers Society.

N.B: A Beer Cellar shall be defined for the purpose of this paper as a room or store, whether temperature controlled or not, situated at any level within licensed premises in which beer is stored.

#### <u>Note</u>

16<sup>th</sup> Edition IEE Wiring Regulations 1991, Page 4 Regulation 120-03 Installations in Premises subject to licensing:

For installations in premises over which a Licensing or other Authority exercises a statutory control, the requirements of that Authority are to be ascertained and complied with in the design and execution of the installation.

#### APPENDIX 'A' to:

## REQUIREMENTS FOR THE ELECTRICAL INSTALLATION IN ENTERTAINMENT CLUBS AND PREMISES REGISTERED UNDER THE FOLLOWING:

- 1. Local Government (Miscellaneous Provisions) Act 1982
- Theatres Act 1968
- 3. Cinemas Act 1985
- 4. Marriage (Approved Premises) Act 1995

#### Scope

This appendix details the general technical requirements for materials and workmanship for a 3-hour fully maintained automatic changeover emergency lighting unit capable of supplying the rated load for a period of 3 hours in the event of mains failure.

#### **Standards**

All the goods and materials used shall be new, without defect and whether or not specifically stated later be in accordance with the current edition of the appropriate British Standard. Goods and material manufactured to other internationally recognised standards may be offered as an alternative but a comparison between the two standards must be supplied and the acceptance of such alternatives is entirely at the discretion of the Licensing Authority.

In addition to meeting the requirements of this Specification, the design and construction of the equipment shall be in accordance with the requirements of BS 5266 Part 1 where applicable.

#### **Battery Unit**

The emergency lighting unit shall be maintained 3 hour rated of the self contained type housed in a sheet steel enclosure having hinged, (or removable) lockable front covers and compartmented. The batteries shall have a separate compartment located in the lower section of the unit. The battery compartment shall have stepped shelves to provide adequate clearance and facilitate inspection and topping up of electrolyte levels and be fitted with suitable acid resistant drip trays.

The sheet steel enclosure shall be so constructed to afford the strength and rigidity necessary to withstand such abnormal stresses that it may be subjected to without damage. Minimum thickness of sheet steel shall be 1.25mm up to 10m and 2.5mm from 10m to 100m without additional strengthening supports. The enclosure to be fitted with suitable ventilation louvres, so designed that they provide protection against contact by fingers in accordance with BSS 3043 'Standard Finger Test' whilst still affording adequate ventilation.

All corrodible material shall be protected against corrosion having due regard to the type of material and its specified environment.

All insulating materials shall be capable of withstanding 600 volt and all current carrying parts unless specifically stated otherwise later shall be designed to carry a minimum of 25% more than the full load rated current of that circuit when operating in an ambient temperature of 30°C without deterioration.

A minimum of three gland holes of appropriate size relative to the equipment or a suitable gland plate shall be incorporated in the enclosure to assist installation. Each hole shall be provided with a blanking grommet or knockout.

Wiring shall be terminated in standard terminal blocks of adequate current rating for their usage located in accessible position. Wiring shall be colour coded Red for positive, Black for neutral and Green/Yellow for earth. Connections for linking internal components shall be made by means of soldered connections, mechanical clamping, crimping or tab connectors. The type of connection that relies on the point of pressure of a screw onto the conductor shall not be used.

Electrical components used in the emergency lighting unit shall be manufactured and tested in accordance with the appropriate British Standard where applicable. In particular, the following components shall be in accordance with the BSS referred to:

Terminals	BSS 4533
Components having windings up to 2KVA	BSS 2214
Transformers and such above 2KVA	BSS 171
Change over contactor	BSS 764
Lead Acid batteries	BSS 440
Voltmeters and Ammeters	BSS 89

#### **Batteries**

Batteries shall be of high performance lead acid plate, tubular or flat plate cell type. Lead acid cells of the automotive type will not be accepted. Batteries of the nickel cadmium type may be offered as an alternative but full details of their construction and manufacture shall be supplied. Batteries shall be of adequate amp-hour capacity for their duty. Series parallel connection of cells will not be accepted.

A log book and hydrometer shall be provided with each battery. Each cell shall be numbered and entered into the log book to enable a record to be kept of each cell condition.

After four years, the emergency lighting system's batteries are to be replaced regardless of condition.

#### **Battery Charger**

The battery charger shall be of the automatic constant voltage regulator type with self protecting current limit to provide protection against low battery volts, reversed battery connection and short circuit conditions. The battery charger shall be isolated from the normal supply by means of a double wound transformer manufactured in accordance with the requirements of BS 171 as appropriate and having an earth screen between primary and secondary windings. It shall be used for no other purpose than battery charging.

The battery charger shall be complete with full wave bridge rectifier having a current carrying capacity 50% more than that required for the associated circuit.

All semi conductor diodes shall be rated at 4 times the rated low voltage side peak voltage of the associated transformer and other semi conductor devices shall be rated at twice running voltage.

The battery charger combination shall be so designed that after the battery has been discharged for a period of 3 hours at the rated load it shall be capable of again supporting the rated load for 3 hours after a 14 hour recharge period. It shall be capable of meeting this requirement without exceeding the maximum designed charging characteristic of the battery. At the end of a 3 hour discharge period the battery shall provide not less than 85% of its nominal voltage at 15°C with its rated connected load. It shall be capable of recharging a completely discharged battery. The battery charger shall be designed as a composite unit capable of meeting its specified duty and the series connection of separate charges of lower voltage rating will not be accepted.

#### **Changeover Contactor**

The unit shall be fitted with an automatic, quick acting changeover switch capable of connecting the emergency lighting to the battery upon mains failure. The changeover contactor shall be manufactured to BS 764 and shall be capable of carrying 25% in excess of the emergency lighting load current.

In some instances, having obtained written authority to do so from the Licensing Authority, contactors manufactured to BSS 5424 may be used. The changeover shall be designed such that the emergency lighting luminaires/exit signs are fully illuminated within 5 seconds after the mains failure.

#### **Labels and Alarms**

The emergency lighting unit shall be complete with individual circuit fuses for the protection of components and one set of suitably rated DP output fuses located in such a position as to be easily accessible for connection of the emergency lighting load.

The unit to be complete with an engraved rating plate readily accessible giving the following information:

Complete unit-output voltage and wattage.

Batteries – voltage, capacity, output manufacture and type.

Charger – charging rate, rated current and voltage together with manufacturer and type.

Contactor – rated current and voltage, manufacturer and type.

The unit shall be complete with the following audio-visual alarms having indicating lamps arranged such that a repeat alarm may be provided at a remote point:

- (1) Mains failure
- (2) Charge fail

In large installations the following additional alarms shall be included:

- (1) High voltage alarm
- (2) Low voltage alarm
- (3) Low electrolyte level alarm

A remote alarm unit is to be provided and sited in an agreed position. The unit shall provide audio-visual indication of a fault condition in the central battery unit and incorporate a facility to mute the audible signal.

#### **Controls**

The Unit shall be complete with a full set of adequately sized terminals for input, output and remote alarm connections including two terminals with a link between them labelled 'remove link to insert nightwatchman's switch'. Double pole HRC fuses to BS 88 are to be provided for the output circuit.

Extra double pole outputs may be provided or alternatively the electrical contractor may provide a separately mounted double pole fuse board dependent on the circuits required.

The unit shall be provided with suitable means for simulating failure of the normal supply for test purposes.

#### **Emergency Lighting Luminaires**

Emergency lighting luminaires shall be distinctive from general lighting luminaires and fitted with small bayonet cap, small edison screw or small bi-pin lamp holders but whichever are used that type shall be used throughout.

The construction of luminaires shall be in accordance with the requirements of BS 4533 where applicable shall embody a metal back plate with either glass, clear cabulite or similar diffuser attached by means of captive, tamper-proof fixings.

Fittings having rigid plastic back plates of robust construction may be offered as an alternative but these must be submitted for inspection and approval by the Licensing Authority and written approval obtained before being used.

External parts shall have adequate resistance to fire and all insulating materials used must be of the self-extinguishing type. When plastic materials of differing composition are used they shall not cause interaction to the detriment of electrical or mechanical safety or performance.

Where fluorescent lamps are used each fitting/sign shall be complete with a suitably rated AC/DC inverter and all associated control equipment compatible with the central battery system.

#### **Exit Signs**

Exit signs shall be of metal construction in accordance with the requirements of BSS 2560 and BSS 5266 where applicable and fitted with small bayonet cap, small edison screw or small bi-pin lamp holders. The signs shall have two tungsten emergency lighting points wired in parallel or one fluorescent emergency lighting point with an illuminated panel on one or both side as required, with a panel in the base to give downward lighting.

They shall be suitable for wall or ceiling mounting and have:

- A green background
- 2. A white running man, and
- 3. Directional arrow.

Viewing distance to be in accordance with BSS 2560 for 36 metres.

NOTE: Signs consisting of self adhesive legends attached to luminaires will not be accepted.