CINEMATOGRAPHS AND CINEMATOGRAPH FILMS

The Cinematograph Regulations, 1950

1950 No. 2133

Made - - - - 28*th December*, 1950
Coming into Operation 1*st February*, 1951

In pursuance of the Cinematograph Act, 1909(a), I hereby make the following Regulations :—

INTERPRETATION OF TERMS

1.—(*a*) In these Regulations the expression " the principal Regulations " means the Regulations made by the Secretary of State under the Cinematograph Act, 1909, and dated 30th July, 1923(b), and the following words and expressions have the meanings hereinafter respectively assigned to them :—

" authorized person " means a person authorized either by the licensee or in writing by the licensing authority to perform on the premises any function to which the Regulation in which the expression occurs relates, and " unauthorized " shall be construed accordingly ;

" the projection room " means the enclosure required by Regulation 7 of the principal Regulations ;

" the reserved space " has the meaning assigned to it by and for the purposes of Regulation 19 of the principal Regulations ;

" television projector " means apparatus whereby electrical signals are converted into the form of an image which is projected by optical or other means upon a screen visible from the auditorium ;

" television recording apparatus " means apparatus for receiving electrical signals which represent a visible image or recorded scene (with or without other electrical signals which represent the accompanying sound) and recording those signals in the form of a visible image on inflammable film.

(*b*) Words and expressions to which a meaning is assigned in Regulation 1 of the principal Regulations shall have the same meaning when occurring in these Regulations.

CITATION, COMMENCEMENT AND SUPERSESSION OF REGULATIONS

2.—(*a*) These Regulations may be cited as the Cinematograph Regulations, 1950, and shall come into force on the first day of February, 1951 :

Provided that premises or equipment or installations therein which existed on that day and complied with the following provisions, namely :—

sub-paragraph (*c*) of paragraph (1) of Regulation 7 ;

Regulations 13 and 14 ;

condition (1) in Regulation 15 ; and

Regulation 17 so far as it applies certain provisions of Regulation 14 to cases within the scope of Regulation 17.

(a) 9 Edw. 7. c. 30.
(b) S.R. & O. 1923 (No. 983) p. 111 ; and *see* S.R. & O. 1930 (No. 361) p. 139

(hereafter in this Regulation called the superseded provisions) of the principal Regulations shall not be required to comply with these Regulations until the first day of January, 1953, or the prior occurrence of one of the events named in the following paragraphs of this Regulation.

(*b*) When such premises as are aforesaid are remodelled or substantially altered they shall comply with these Regulations.

(*c*) When a building is constructed on such premises, it shall comply with these Regulations so far as appropriate to the purpose of the building.

(*d*) When such premises are substantially rewired, they shall comply with these Regulations so far as relating to electrical equipment or installation.

(*e*) When equipment is placed or wiring is installed in such premises and the next foregoing paragraph does not apply, the equipment so placed or wiring so installed shall comply with these Regulations, so far as appropriate thereto.

(*f*) On the first day of January, 1953, or when and to the extent that prior occurrence of an event has by virtue of the foregoing paragraphs lettered (*b*) to (*e*) required compliance with any provision of these Regulations, the superseded provisions shall cease to have effect.

General

3.—(*a*) Where a pipe, duct, or conductor, for gas, water, electricity or other services enters a building through a hole in the lowest floor or made in an external wall below the level of the ground immediately adjoining that wall the hole shall be so stopped as to prevent the passage of gas except by means of a gas supply pipe.

(*b*) The holes through which pipes, ducts, or conductors, within a building pass through a fire-resistive wall, partition, or floor shall be so sealed as to prevent the passage of fire and smoke.

4. Main valves and cocks controlling a supply of gas shall be placed as near as is practicable to a door which is easily accessible from a highway, and shall be secured against unauthorized interference.

Lighting

General Lighting

5.—(*a*) Every part of premises to which for the time being the public have access shall unless it is adequately lighted by daylight be provided with means of adequate illumination, hereafter in these Regulations called "the general lighting".

(*b*) If premises are regularly used for the purpose of cinematograph exhibitions the general lighting shall be by electricity or gas.

(*c*) Subject to the provisions of Regulation 11 the general lighting shall at all times when the public are upon the premises be—

(i) maintained in working order and capable of full illumination, and

(ii) so kept in use that illumination is adequate, but illumination shall not be deemed inadequate on the ground that by such arrangements as are allowed by the next following Regulation the intensity of illumination is reduced in the auditorium.

Dimming

6. Any arrangement for reducing the intensity of illumination in the auditorium shall be such—

(i) where the said illumination is by gas that the means of regulating its intensity is not situated in the reserved space, the projection room, or a room in which film is manipulated, used, or stored,

(ii) where the said illumination is by electricity that the means of regulating its intensity is not situated in a rewinding room, or a room in which film is stored, and

(iii) whatever is the method of the said illumination that independent means of regulating its intensity not being upon the stage or in the reserved space or in a room in which film is manipulated, used, or stored is provided in a position or positions readily accessible to the staff, access to which is not likely to be impeded by the public.

Safety Lighting

7.—(*a*) Means of illumination, hereafter in these Regulations called " the safety lighting ", shall be provided—

(i) in the auditorium and,

(ii) unless they are adequately lighted by daylight, in all exits leading therefrom to the outside of the premises, including all courts, passages, stairways, or ramps, and in all other parts of the premises to which for the time being the public have access, and

(iii) for all notices indicating exits from any part of the premises.

(*b*) Subject to the provisions of Regulation 11, the safety lighting of every part of the premises not adequately lighted by daylight shall at all times when the public are upon the premises be maintained in working order, and so kept in use that it is adequate to enable the public to see their way out of the premises.

(*c*) Except as provided by Regulations 8, 9, and 10, the safety lighting shall not be supplied from the same source as the general lighting of the premises.

(*d*) Where the safety lighting is by oil lamps or night light lamps, mineral oil shall not be used therein and, where the safety lighting is provided by such lamps or by candles, the lamps or candles shall be placed at a safe distance from woodwork or other combustible material and shall where practicable be placed out of reach of the public.

(*e*) (i) In addition to their illumination by the safety lighting, all notices indicating exits from any part of the premises shall at all times when the public are upon the premises be illuminated by the general lighting.

(ii) Where a flame illuminant is used for the purpose of such a notice it shall not be so enclosed with or so near to an electric lamp or electrical conductor as to cause damage thereto, and the metal of the electric fitting, wire, or conduit and the sheath of a cable shall not be in contact with a gas fitting or gas pipe.

(*f*) Electrical conductors forming part of the safety lighting system shall not be contained in the same conduit or incorporated in the same cable as electrical conductors used for any other purpose.

(*g*) The safety lighting system shall not be controllable from the reserved space, projection room, or rewinding room, or a room where film is stored or from the stage, or from any place accessible to the public.

Batteries for safety lighting

8. Where the safety lighting is derived from a battery of accumulators the battery shall be fully charged before the public are first admitted on any day, and except in the cases for which Regulations 9 and 10 provide shall be of such capacity and so maintained as to be capable of supplying at normal voltage the full load which will be connected thereto while the public are upon the premises.

Floating Batteries

9. A floating battery of accumulators for the purpose of supplying the safety lighting may, notwithstanding any provision of these Regulations, be connected with or without converting or rectifying apparatus to the same source of supply as the general lighting, if—

(i) the capacity of the battery is sufficient to supply at normal voltage the load which will be connected thereto for not less than three hours;

(ii) the rate of charging the battery is so regulated and adjusted that the battery does not discharge under normal conditions;

(iii) any converting or rectifying apparatus for the charging supply to the battery is reserved for that purpose only;

(iv) where the charging arrangements permit a reversal of current, controlling switchgear capable automatically of disconnecting the battery from the source of supply, in case of failure of supply, is provided and on each day before the public are admitted to the premises is tested by a competent person, the test including disconnexion of the source of supply and observation of the consequent automatic operation of the controlling switchgear. If the controlling switchgear becomes inoperative the next succeeding sub-paragraph numbered (v) of this paragraph shall apply as if a failure of the source of supply had occurred, and

(v) a suitable visual or audible signal operating at a place where an authorized person is normally present shall be arranged to indicate a failure of the source from which the battery is charged.

Trickle charged batteries

10. The safety lighting may, notwithstanding any provision of these Regulations, be derived from the same source as the general lighting of the premises, and be so derived otherwise than by connecting a floating battery of accumulators to that source as provided by the last foregoing Regulation, if the conditions numbered (i) to (v) in that Regulation are satisfied and also—

(i) an automatic quick acting change-over switch or switches is or are installed capable of connecting the safety lighting to a battery or batteries of accumulators and such change-over switch or switches conform to the appropriate British Standard Specification current at the time of fixing,

(ii) the rated capacity of every such switch is not less than fifty per cent. in excess of the maximum current demanded by the safety lighting system,

(iii) when such a switch is in the safety lighting position, the pressure on the contacts shall be not less than that specified in British Standard Specification 764, whatever voltage may occur on the mains supply between zero and the voltage at which the switch reverts to the mains supply position.

Failure of Lighting

11.—(*a*) In the event of failure of the general lighting the public shall be required to leave the premises forthwith:

Provided that where the general lighting is by electricity the public need not be required to leave the premises forthwith, but shall be required to leave the premises if the general lighting is not restored within one hour.

(*b*) In the event of failure of the safety lighting the auditorium shall at once be fully illuminated by the general lighting and the public shall be required to leave the premises forthwith:

Provided that where the safety lighting is by electricity the public need not be required to leave the premises forthwith, but shall be required to leave the premises if safety lighting is not restored within one hour.

(*c*) In the event of failure of the source of supply from which in accordance with either of the last two foregoing Regulations a battery of accumulators is charged the public shall be required to leave the premises within one hour unless the source of supply is by that time restored.

(*d*) When the public have been required to leave the premises in accordance with paragraph (*a*) or (*b*) of this Regulation, they shall not be again admitted until the general lighting or safety lighting as the case may be, failure of which was the occasion of their being required to leave, has been restored, and when the public have been required to leave the premises in accordance with paragraph (*c*) of this Regulation, they shall not be again admitted until the source of supply, failure of which was the occasion of their being required to leave, has been restored, and the battery has been fully charged.

(*e*) Where paragraphs (*c*) and (*d*) of this Regulation refer to failure of a source of supply they shall be deemed to extend also to the cases for which Regulations 9 and 10 provide, where the switchgear mentioned in condition (iv) in Regulation 9 becomes inoperative, and accordingly references to restoring a source of supply shall be deemed to include the switchgear becoming again operative.

ELECTRICAL REQUIREMENTS

General

12.—(*a*) Where electrical energy is used for lighting or other purposes, the requirements of this and the nine next following Regulations shall apply to service conductors and apparatus connecting a supply of electricity from the mains of an electricity supply authority and to any other electrical installation on the premises:

Provided that the said Regulations shall not apply to main generating transforming or converting plant or switchgear for electrical supply to the premises or for supply to outside consumers.

(*b*) Except as otherwise provided in these Regulations the electrical installation generally shall be in accordance with the Regulations for the Electrical Equipment of Buildings issued by the Institution of Electrical Engineers and current at the time when it is installed, and all materials and apparatus for which a British Standard Specification is current at the time of being installed shall conform to the appropriate Specification.

(*c*) The electrical installation shall be so constructed, installed, protected, worked, and maintained, as to be at all times in a safe condition.

(*d*) Fuses, circuit-breakers, or other suitable protective devices which will operate automatically at current values suitably related to the safe current ratings of the conductors and apparatus to be protected shall be provided for every main circuit and sub-circuit.

(*e*) There shall be provided for every main circuit and sub-circuit earth-leakage protective devices which on the occurrence of an earth fault will disconnect the defective circuit:

Provided that this requirement shall not apply where the maximum possible earth fault leakage current from the circuit is greater than that required to operate the circuit overload protective devices.

(*f*) All metal work liable to become live if the insulation of conductors becomes defective or if a defect occurs in apparatus of any kind shall be efficiently earthed.

13.—(*a*) Except where an open type switchboard is situated in a room accessible only to authorized staff and the voltage between conductors does not exceed 650 volts, every main supply and main circuit shall be controlled either by an efficient handle-operated metalclad circuit-breaker of adequate breaking capacity with excess current protection on each live pole, or by efficient linked switches of handle-operated metalclad type arranged to break circuit on each live pole and associated with fuses of adequate rating and breaking capacity on each live pole. Such fuses shall be in separated metal boxes or combined with their associated switches in one metal container for each main supply or main circuit.

(*b*) Where the main circuits are controlled from a switchboard of the metalclad type having its busbars totally enclosed in a rigid metal case and being arranged to incorporate means of direct control of each main circuit, a main switch or circuit-breaker need not be provided to control such busbars if other means of isolating them from the supply be readily accessible on the premises.

(*c*) Except in parts of the premises specifically available for obtaining refreshments, switch lampholders shall not be provided in a part of the premises open to the public.

(*d*) Every electric sign, notice or advertising device on the outside of the premises shall be controlled by an efficient switch or circuit-breaker capable of cutting off all pressure and situated in a position easily accessible to the staff.

(*e*) Switches other than door operated switches shall be of such a type or so placed that they are not exposed to unauthorized interference.

14. 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 and convenient for reference.

15.—(*a*) All wiring shall be adequately protected against leakage and short circuit, and except as provided in paragraph (*b*) of this Regulation the protection shall be by heavy gauge, solid drawn or welded screwed steel conduit or by steel armouring or other hard metal sheathing having positively clamped or other equivalent joints. The protective covering shall be electrically and mechanically continuous. Wiring protected by a lead or rubber sheath only, or contained within wood casings, shall not be deemed to be adequately protected within the meaning of this Regulation.

(*b*) Paragraph (*a*) of this Regulation shall not apply—

(i) to necessary flexible conductors complying with paragraph (*c*) or to slack conductors complying with paragraph (*g*) of this Regulation,

(ii) to battery connecting conductors,

(iii) to the wiring of a bell, telephone, deaf aid or public address apparatus, or signalling circuit, if the impedance of the circuit is such as to limit the maximum fault energy in a short circuit or earth fault at any point to a value which does not exceed 12 watts,

(iv) to the wiring of organs, except as provided in Regulation 22,

(v) to the wiring of depolarizer circuits for electric hand torch batteries, if the voltage does not exceed 3 volts, the transformers are double-wound, and the secondary circuits are suitably protected by fuses, are earthed on one pole, and are prevented by limiting resistors from passing a current greater than 300 milliamperes,

(vi) to wiring for the high-voltage circuits of luminous-discharge-tube installations, or

(vii) to installations on the premises of a public bath or public ice rink, or to temporary wiring, or wiring under repair and alteration, if such installations or wiring are reported to the licensing authority and comply with any conditions that authority may impose.

(*c*) (i) Flexible conductors shall be as short as practicable and where necessary shall be protected by tough rubber sheathing or mechanically strong flexible metallic tubing or in some equally efficient manner against damage or injury to the insulation. The lead sheathing of a lead sheathed cable shall not be deemed to be metallic tubing or to afford efficient protection for this purpose.

(ii) Flexible conductors shall be provided with proper mechanical fixing and reinforcement at the point of entry into all apparatus, accessories, fittings, and machines to which they are connected.

(*d*) Cooking appliances and refrigerators shall be connected by fixed wiring enclosed in conduit complying with the requirements of paragraph (*a*) of this Regulation.

(*e*) Wiring shall not be placed in any ventilating passage or duct.

(*f*) (i) Where portable lamps and other portable apparatus are necessary, their connexion shall be by socket outlets and plugs complying with the next three sub-paragraphs of this paragraph:

Provided that the sub-paragraphs numbered (ii) and (iii) shall not apply to a socket forming part of the permanent electrical equipment for a stage or platform for theatrical or scenic effects, controllable at a point within view of the stage or platform.

(ii) All socket outlets and plugs shall be so constructed and connected that the pins or plugs cannot be touched while they are live.

(iii) Every socket outlet which is accessible to the public and is not a socket for a telephone, deaf aid, or public address apparatus, shall be controlled by a switch immediately adjacent to the socket, capable of cutting off all voltage from the plug and so interlocked as to prevent insertion or withdrawal of the plug when the switch is in the "On" position.

(iv) Connexions of the type known as lampholder plugs shall not be used.

(*g*) Slack conductors used on projectors, spotlights, effects lamps, or other electrical apparatus for the production of lighting or optical effects, shall where necessary be protected by heat-resistive material.

16.—(*a*) All terminals and other current carrying parts of electrical apparatus and cables shall be effectively enclosed. Electric motors, transformers, and generators, with associated control apparatus, shall be so constructed or protected as to prevent accidental contact with, or short-circuiting of, live conductors or terminals.

(*b*) Electrical apparatus arranged to dissipate heat shall be efficiently guarded or enclosed and so constructed that no part of the guard or enclosure at any time attains a temperature exceeding 212 degrees fahrenheit. The top of the external part of any such guard or enclosure shall be so shaped and so remote from surrounding objects as to prevent the lodging of any article thereon, and no cover shall be so placed as to impede the free ventilation of the guard or enclosure.

Insulated cables shall not be placed above such apparatus in such a position as to be deleteriously affected by the heat. Electric resistors, heaters and radiators shall be permanently fixed in position, and shall be suitably spaced from woodwork and other combustible material.

(*c*) Rectifiers placed behind the screen for the purpose of excitation of loudspeakers shall be so disposed and fixed that there is no risk of fire. They shall be completely enclosed by a ventilated metal guard. There shall be no restriction of free ventilation by any material and the adjacent space shall not be used for storage.

Accumulators

17.—(*a*) Electric accumulators unless installed in specially reserved rooms or compartments shall be completely enclosed, together with the terminals, in substantial casings constructed of, or lined with, insulating material, which shall be glass or other material which does not readily catch fire. Accumulators in cells or containers of celluloid shall not be installed, used or stored.

(*b*) Where accumulators are used to supply either the general or the safety lighting systems—

(i) outgoing circuits shall be protected against excess current by suitable fuses or circuit-breakers situated as near as practicable to the battery terminals, but not in the battery room. The excess current protection of subsidiary circuits shall be adequate for their purpose;

(ii) the battery-connecting conductors shall not be enclosed in metallic conduit between the battery and the points where the fuses or circuit-breakers are situated but shall be so insulated as to prevent accidental short circuit;

(iii) accumulators for safety lighting shall not be used for any other purpose; and

(iv) the battery installation shall be inspected by a competent person at least once in every six months. A discharge test shall be made at the normal discharge rate at least once in every six months and the result and date shall be entered in a record kept for examination by persons authorized by the licensing authority.

Luminous Discharge Tubes

18. All luminous-discharge-tube installations irrespective of voltage and of their being inside or outside a building shall comply with the following requirements:—

(i) Where the rated electrical input to a luminous discharge tube or group of such tubes in series including the stabilizing device or devices exceeds 500 volt-amperes and normal methods of protection against excess current cannot be applied by reason of the characteristics of the circuit, special

means shall be provided automatically to disconnect from the supply the circuit, or that part of the circuit including the stabilizing apparatus, in the event of short circuit, current leakage in excess of 20 per cent. normal full-load value, or other abnormality or irregularity caused by failure of insulation or other defect;

(ii) Control apparatus including transformers for luminous discharge tubes shall not be placed in the space between a ceiling and the floorboards above;

(iii) Transformers and choke coils shall be of the fixed reactance type;

(iv) Oil or other inflammable insulating material which is fluid at normal working temperature shall not be used in any transformer or other apparatus forming part of a luminous-discharge-tube installation;

(v) Transformers, starting and control gear, and other gear for luminous discharge tubes shall be effectively protected by metal enclosures; and

(vi) Fixed luminous discharge tubes shall be placed out of reach of the public or so protected that if a tube is broken a live electrode cannot be touched. Such protection may be afforded by enclosure or the use of an automatic device which will cut off all pressure from the electrodes if a tube is broken.

19. Without prejudice to the requirements of the last foregoing Regulation and of Regulation 12, luminous-discharge-tube installations in which the voltage exceeds 650 volts (high voltage) between any two parts of the installation shall comply also with the following requirements:—

(i) Where installed in roof voids or voids of balconies, or in any other position where there is risk of mechanical damage, cables shall be armoured or otherwise suitably protected, and unarmoured lead covered cables shall not be drawn into metal conduits, except for short lengths passing through walls or floors. Longer lengths of unarmoured cables shall be protected by metal casings other than conduits. All metal sheathing, armouring, casing and other metal (including isolated lengths) used to protect the cables shall be earthed;

(ii) The connexion to earth of every transformer and all metalwork liable to become charged at high voltage, in the event of failure of insulation or other defect at any point, shall be an earth continuity conductor independent of any system of metal conduit or cable sheathing;

(iii) Every high-voltage circuit or part thereof shall be provided with means of automatic disconnexion from the supply in the event of the flowing of excess current or the leakage of current. If the arrangement of the circuit or part thereof is such that ordinary excess-current devices are ineffective, the means of disconnexion shall be in accordance with the requirement numbered (i) in the last foregoing Regulation;

(iv) Fixed interior installations as well as exterior installations shall be provided outside the building in or on which they are installed with a fireman's switch or switches, arranged to cut off directly or by remote control the mains supply to the installations, and fixed in a position accessible to firemen but not easily accessible to the public. Where two or more fireman's switches belonging to the same premises are in one street they shall be fixed near to each other;

(v) The total rated transformer capacity for transportable self-contained high-tension luminous-discharge-tube units connected to the supply mains shall not exceed 100 volt-amperes for each unit; and

(vi) Where a high-voltage luminous-discharge-tube installation which runs unattended is used within a building for purposes of window lighting or display, a conspicuous switch controlling the installation shall be provided in the main entrance of the building, or in exceptional circumstances in some other position approved by the licensing authority.

Electrical Apparatus in Separate Enclosures

20.—(*a*) The following plant and apparatus shall be placed in a separate enclosure or enclosures which shall not communicate directly with the auditorium or with any exit therefrom to the outside of the building, shall be so constructed as to prevent the spread of fire from within to the rest of the premises, and shall not be accessible to the public:—

(i) plant for the generation of electrical energy driven by steam, gas or oil engines, or other prime movers ;

(ii) main supply or main circuit transformers.

(*b*) Main supply and main circuit switchgear and fuses shall be placed in an enclosure the door of which shall, if the enclosure communicates with any part of the premises to which the public are admitted, be kept locked.

(*c*) The electrical installation in any place where film is manipulated, used, or stored shall comply with the following provisions:—

(i) The lighting shall be by electricity and shall be connected to sub-circuits separate from the general and safety lighting systems ;

(ii) All lighting fittings, including portable lamps, shall be of substantial construction and unless complying with requirement (vi) in Regulation 18 for luminous-discharge-tube installations shall provide for the total enclosure of the lamp and lampholder. Permanent lighting fittings shall be fixed in position and the conductors thereto shall be protected by being enclosed in metallic tubing. Such tubing may be rigid or flexible, but the lead sheathing of lead sheathed cable shall not be deemed to be metallic tubing for this purpose ; and

(iii) The covers of switches and dimmers shall be so constructed as to prevent inadvertent admission of cinematograph film.

(*d*) The electrical installation in the rewinding room shall comply with the following additional provisions:—

(i) Illuminated viewing devices with lighting fittings for the examination of film on the bench shall be so constructed as to prevent the admission of film cuttings ;

(ii) As a precaution against the accumulation of charges of static electricity with consequent risk of ignition of inflammable vapours from solvents used for the jointing of film, all metalwork of apparatus associated with or used for the rewinding of film shall be electrically connected together and efficiently earthed ; and

(iii) No electrical apparatus other than that used for lighting or heating the rewinding room shall be installed or placed therein.

(*e*) No electrical apparatus other than that used for lighting the film store shall be installed or placed therein.

21.—(*a*) Plant or apparatus specified in paragraph (*a*) or (*b*) of the last foregoing Regulation shall not be installed, stored, or placed within the projection room.

(*b*) Electrical apparatus within the projection room shall comply with the following provisions:—

(i) Transformers, rectifiers, and choke coils shall not be used for any purpose other than supplying current for electrical arcs or for sound reproduction or television apparatus, and transformers for these purposes shall be double wound;

(ii) Transformers, rectifiers, choke coils, contactor coils and other coils, when carrying continuously the full-load current for which they are rated, shall not exceed the limits of temperature rise specified in the appropriate British Standard Specification and the current of each such component shall not exceed that corresponding to an output of 20kVA for each converting unit;

(iii) Transformers, rectifiers, and choke coils shall be so guarded or enclosed as to prevent ignition or decomposition of film. Such apparatus shall be so constructed and maintained that no external part of the guard or enclosure shall attain a temperature exceeding 212 degrees fahrenheit and the top of the external part of such guard or enclosure shall be so shaped and so remote from surrounding objects as to prevent the lodging of any article thereon. Free ventilation of the apparatus shall not be impeded;

(iv) The insulating supports for all arc electrodes shall be kept clean and free of conducting dust;

(v) Where the light source is an electric arc, an ammeter shall be included in each projector arc circuit;

(vi) Where the pressure of the supply to the arc or any other type of projector exceeds 250v. D.C. or 125v. A.C. between conductors at the lamp terminals, all access doors of the projector lamp enclosure shall be so interlocked with the supply as to secure that all voltage is cut off from the lamp terminals when any such door is opened;

(vii) The supply for the projectors shall be by way of a main circuit separate from that of the general lighting;

(viii) Efficient means of control, direct or remote, shall be provided within the projection room whereby all voltage may be cut off from the arc, driving motor, amplifier or amplifiers and all sound reproduction equipment associated therewith, and all effects lamps, by such switch or switches as may be necessary, having regard to the requirements of sub-paragraphs (ix) and (x) of this paragraph of this Regulation;

(ix) Means for individual isolation of each projector and its converting apparatus from the source of supply shall be provided within easy reach of the operator;

(x) Except as allowed by paragraph (ii) of Regulation 6 there shall be no contactors, circuit fuses, circuit-breakers, or switches in the projection room other than those essential for the operation of the projectors, sound reproduction apparatus, spotlight effects, lamps, and television apparatus:

Provided that this paragraph shall not apply to such parts of the electrical installation of the premises as were in use before the coming into force of these Regulations and have not been altered or renewed;

(xi) Where a cover or a door is provided for purposes of valve replacement on sound reproduction apparatus, all live terminals which may then be exposed shall, in order to comply with sub-paragraph (ii) of paragraph (*f*) of Regulation 15, be so guarded that they cannot be accidentally touched or, alternatively, an interlock shall be so fitted to the cover or door that the supply is disconnected from the apparatus when the cover is removed or the door opened ;

(xii) Efficient means, suitably located, shall be provided whereby amplifiers, motors, power supply units, field supply units, exciter lamp supply units, and all other units of the sound reproduction apparatus, are individually protected from risks arising from failure of insulation or from overloading ; and

(xiii) The voltage of D.C. circuits installed for the excitation of loud speakers after the coming into force of these Regulations shall not exceed 250v.

Organ Electrical Equipment

22.—(*a*) For the purpose of complying with Regulation 15 the wiring of organs, including the wiring for blowers, motor generators, lift operation, decorative lighting, or other purposes shall where the console is movable be placed in flexible metallic tubing. The lead sheathing of lead sheathed cable shall not be deemed to be metallic tubing for this purpose.

(*b*) Where such wiring is enclosed within flexible metallic tubing or is in or on the console of the organ, it shall be insulated and further protected by non-metallic fire-resisting wrapping, braiding, or sheathing.

(*c*) Where such wiring is in or on the console of the organ, screwed steel conduit or flexible metallic tubing shall not be deemed to be required by any provision of these Regulations.

(*d*) The voltage between conductors of circuits controlled by the keyboard shall not exceed 30 volts.

(*e*) A clear glass inspection cover shall be provided through which the interior of the console can be examined to detect the presence of vermin.

(*f*) The electrical input circuits of organs shall be protected by main fuses and in addition fuses shall be provided to protect so far as is practicable the sub-circuits in the various sections and stages of the electrical apparatus of the organs including the keyboard circuits.

(*g*) Oil or other inflammable insulating material which is fluid at normal working temperature shall not be used in any transformer or other apparatus associated with the organ electrical equipment.

(*h*) Main switches shall be provided whereby all voltage may be cut off from the electrical wiring and apparatus of the organ, including its associated mains supply unit, if any.

(*i*) A pilot light so fixed as to be readily observed shall be illuminated when any part of the electrical wiring and/or apparatus of the organ is energized.

TELEVISION

Electrical Requirements

23. The main circuits supplying the television equipment shall be protected against danger resulting from short circuit, excess current, or earth leakage:

Provided that the protection against earth leakage shall not be required where the maximum possible earth fault leakage current from the circuit is greater than that required to operate the circuit overload protective devices.

24. Metal conduit or metal ducting enclosing the electrical wiring or conductors supplying energy in connexion with any television equipment shall contain no other circuit or sub-circuit conductors.

Television Equipment: General

25. The prospective fault current at a voltage above 650 volts shall be limited to one ampere and the applied voltage shall not exceed 150,000 volts.

26. Where normal methods of protection against excess current cannot be applied by reason of the reactive or other characteristics of the circuit, special means of electrical or thermo-electric type shall be provided in such a way as automatically to disconnect from the supply the circuit or that part of the circuit (including transformers, chokes and smoothing devices) in the event of a short circuit, current leakage of 100 per cent. in excess of normal full load value, or other abnormality or irregularity caused by failure of insulation or other defect.

27. The apparatus or equipment for transforming or converting the low-pressure supply to a voltage above 650 volts shall comply with the following requirements:—

(i) It shall not be in the auditorium, projection room, or rewinding room;

(ii) It shall be effectively enclosed within a container constructed of metal or other fire-resisting material and adequately ventilated;

(iii) Unless the said apparatus or equipment is situated in an enclosure complying with the provisions of paragraph (*a*) of Regulation 20, it shall be so constructed and maintained that no external part of the container attains a temperature exceeding 180 degrees fahrenheit and the top of the external part of the container shall be so shaped as to prevent the lodging of any article thereon;

(iv) Efficient handle-operated metalclad circuit-breakers of adequate breaking capacity, or efficient linked switches of handle-operated metal-clad type arranged to break circuit on each live pole, shall be fitted to cut off the electrical supply to the apparatus or equipment and shall be fixed as near as is practicable to the enclosure, but not in such a way as to be accessible to the public. Where a cover or door is provided for the purpose of inspection of the apparatus or equipment, an interlock shall be so fitted to the cover or door that the supply is disconnected from the apparatus when the cover is removed or the door is opened. There shall also be provided means whereby immediately after the operation of the interlock all live terminals of the high-voltage apparatus are effectively earthed before the cover can be removed or the door opened; and

(v) The cover of the container, or door to the aforesaid enclosure, shall be fitted with an efficient locking device, the key of which shall be kept in the custody of a responsible person.

A notice shall be placed on the cover or door reading:—

"DANGER—HIGH VOLTAGE"

in letters not less than one and a half inches high.

Television Projector

28. The television projector shall comply with the following requirements:—

(i) It shall be totally enclosed in a casing of metal or other fire-resisting material except for the aperture or port for the light beam. Each cover or door giving access to the casing surrounding the high-voltage terminals shall be so interlocked with the supply as to secure that all voltage is cut off when the cover is removed or the door is opened. There shall also be provided means whereby immediately after the operation of the interlock all high-voltage live terminals are efficiently earthed before the cover can be removed or the door opened. Where it is possible to touch any live conductor or terminal by way of the aperture or port, the latter shall be fitted with a cover of glass or other transparent material;

(ii) Effective automatic relays shall be provided which are capable of disconnecting the television projector from the source of supply should the temperature of the casing exceed 140 degrees fahrenheit;

(iii) Television projector apparatus shall be so screened, except at the projected light beam, that the radiation of x-rays shall not exceed 0.5 Rontgen units during seventy hours continuous operation;

(iv) Where the television projector is installed in the auditorium, effectual means shall be taken, by way of a suitable barrier or otherwise, to maintain a clear space at least three feet wide around the projector; and

(v) No television apparatus shall be installed or used which involves the use of a screen constructed of celluloid or other highly inflammable material.

Control Unit

29. Where a separate unit for the control of the television projector apparatus is situated in the auditorium it shall be enclosed by a container of metal or other fire-resisting material so that no live terminals or conductors can be touched and that unauthorized interference is prevented.

30. The voltage between the conductors or between a conductor and earth within the control unit shall not exceed 650 volts and the requirements of Regulation 26 (which relate to circuit protection) shall apply.

Aerial Array

31. Aerials associated with television equipment shall be of adequate constructional strength and firmly secured to the building.

32. An efficient lightning arrester shall be provided.

Screen

33. Where a screen is interposed between the television projector and the public, the light beam shall be so arranged or filtered that no member of the public is subjected to the radiation of x-rays of an intensity exceeding 0.5 Rontgen units in seventy hours continuous operation.

Testing of Equipment

34. All equipment associated with television projection shall be suitably tested to ensure safe performance before installation. Cathode ray tubes or other evacuated vessels shall be mechanically pressure tested before use as a safeguard against implosion. Where automatic relays are installed they

shall be tested both before installation and periodically afterwards to ensure that they are in proper order. It shall be a principle of the design of all relays that, in event of failure of the relay, conditions of safety will prevail.

Maintenance

35. All apparatus and equipment associated with television, including earth continuity conductors and circuit protective devices, shall be inspected and tested by a competent person at least once in every year. The result of such tests and inspections shall be entered in a book specially reserved for this purpose which shall be available for inspection by any authorized person.

36. Cathode ray tubes shall not be changed while members of the public are upon the premises.

Television Recording Apparatus

37. Television recording apparatus shall be in an enclosure complying with the provisions of the Manufacture of Cinematograph Film Regulations, 1928(a):

Provided that paragraph (ii) of Regulation 12 of those Regulations shall not apply in so far as it relates to transformers rated at not more than 10 watts required for individual amplifiers or similar apparatus.

Inspection

38. No apparatus or equipment associated with television shall be installed or used unless fourteen days' notice has been given to the licensing authority, and facilities shall be given for any additional investigation which that authority requires.

EXTENT OF REGULATIONS

39. These Regulations shall not extend to Scotland.

J. Chuter Ede,
One of His Majesty's Principal Secretaries of State.

Home Office,
Whitehall.
28th December, 1950.

(a) S.R. & O. 1928 (No. 82) p. 522.