

Projection suites

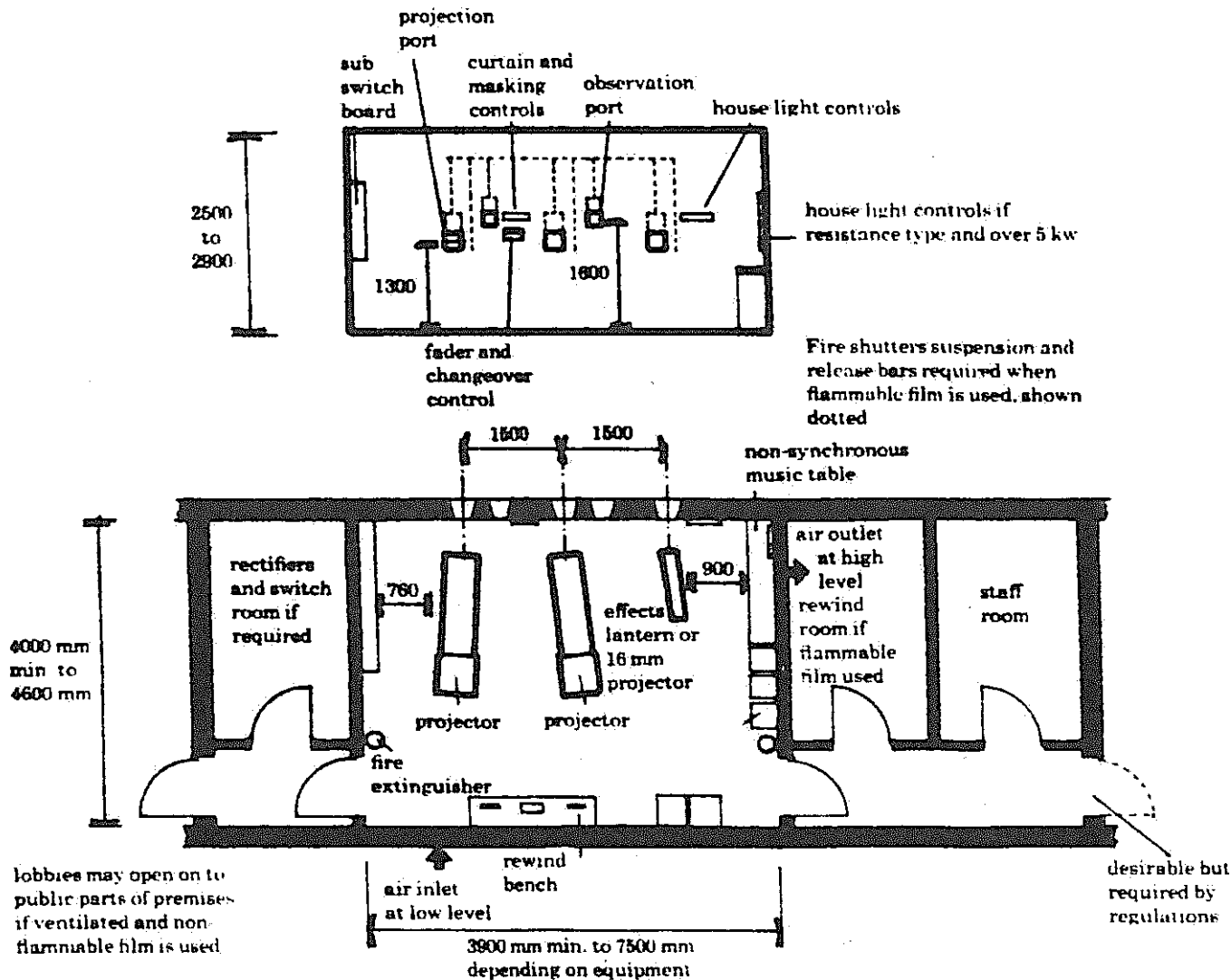
ref

date

Technical Data

Projection suites may include a projection room, a re-winding room, a dimmer and switch room, a work room and store, remote control room, a projection staff rest room and a lavatory. Unless automatic control equipment is installed, a projectionist must be on duty in the projection room whenever the projectors are in use.

A convenient size for a projection room containing a minimum of equipment is 2.9 m x 4 m. If an effects lantern and spotlight are included, the minimum size should be 5.5 m x 3.9 m. The essential items of equipment are two projectors, sound amplifiers and controls. Ancillary equipment may include an effects lantern, a



Typical layout of projection suite

non-synchronous music desk, a rewind bench, rectifiers and screen masking controls. Some of these may be in separate rooms.

Projectors are usually placed 1.5 m apart centre to centre which leaves the projectionist about a metre clear in which to work. Statutory regulations demand that there is enough space round the projector and other equipment for the projectionist to work freely. The minimum clear space is 750 mm. A typical layout for the projection room is shown in the diagram. The effects lantern which may double as a follow spot, is normally to the right of the projector and adjacent to non-synchronous music equipment and dimmer controls for the auditorium lighting. There should be an observation port close by.

Ports

The wall separating the projection room from the auditorium will have a projection port for each projector, an observation port for each projectionist and a port for an effects lantern. The projection and lantern ports are glazed with optical-quality glass while the observation ports are fitted with plate glass. Cleaning is simplified if the glass is fitted into hinged metal frames. Where flammable films are used all ports must be provided with fire shutters made from heavy-gauge sheet (3 mm steel) in steel guides and designed so that the shutters fall to cover the ports when released. The regulations require that fire shutters can be released both from within the projection room and from a position in the auditorium, usually at the back. Where non-flammable film is used these fire shutters are not required by regulations, but shutters of some kind should be provided to prevent stray light reaching the screen through the ports.

Projector power supply

16 mm portable equipment needs a 13 amp or 15 amp socket outlet. For 35 mm equipment with arcs requiring up to 45 amps a single-phase supply is sufficient, but above this three-phase supply is necessary.

Lighting

Lighting in projection rooms has to be arranged with care so that no light is accidentally spilled through the ports. Bracket fittings on the front wall of the projection room to the right of each projector or narrow beam spotlights on adjustable arms suspended from the ceiling are usually considered suitable.

Heating

Where non-flammable film is used the temperature should not be allowed to fall below 10°C especially when film is stored overnight. Electric heaters controlled by a thermostat are often used. A suitable temperature for working is 18°C and heating must be provided to maintain it. Incandescent lamps or pulsed discharge lamps give off enough heat themselves, except in very cold weather or in large projection rooms.