

STATION EQUIPMENT MONITORING

TECHNICAL INFORMATION / REQUIREMENTS

All escalators and passenger conveyors at railway stations shall comply with BS EN 115:1995 and where they are in the passenger flow, they shall be of the "Public Service" type. For the "Public Service" type of escalator and passenger conveyor, as well as implementing the additional recommendations detailed in Annex D (of BS EN115), the following specific options in BS EN 115: 1995 shall be applied as far as reasonably practicable:

- The angle of inclination shall not exceed 30° for escalators and 5° for passenger conveyors.
- The minimum width of tread way for escalators and passenger conveyors shall be 1000mm. Passenger conveyors which are to be used by passengers with self help trolleys must be at least 1400mm wide.
- Where an escalator is installed in a shaft with a curved roof, then
- The overhead clearance must be a minimum of 2300mm at the centre of the nose of the steps and 2200mm at the end of the nose of the steps.

or

- Agreement to use values smaller than the above must be obtained from HM Railway Inspectorate.

Note: Any such agreement is likely to be limited to small infringements of the stated dimensions and even then is likely only to be given in exceptional circumstances.

Clearances outside the outer edge of the handrail must be subject to the following conditions:

- The clearance to the adjacent wall must not be less than 150mm, with this clearance continuing up to a height of at least 1700mm above step level. Whilst emergency stop buttons may be situated between the handrail and the wall, they must not be within 80mm of the handrail;

or

- Agreement to use values smaller than the above must be obtained from HM Railway Inspectorate.

Note: Any such agreement is likely to be limited to small infringements of the stated dimensions and even then is likely only to be given in exceptional circumstances.

All escalators, including their associated architectural features, must comply with Health and Safety Executive Guidance Note PM 34.

The normal practice must be to install compact type escalators, but the remote type must be installed when the following conditions exist:

- The escalator is on an escape route and insufficient alternative routes are available to meet all conditions of escalator breakdown.
- Where the location of the escalator makes the use of the compact type impracticable.

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- When lifting floor panels to gain access for cleaning rubbish trays will cause an obstruction at times when passenger flows will make this unacceptable.
- To reduce the possibility of trapping between the skirting and the steps, pallets or belt, a suitable deflector device must be fitted e.g. a continuous bristled brush.
- The balustrades, skirting, steps, pallets and belts must be manufactured from non-combustible material as defined in BS 476, Part 4.
- Lubricants and methods of lubrication must be selected to minimise the risk from smoke and fumes, where over-heating or fire occurs.
- All escalators, passenger conveyors and their surrounds must be illuminated to the minimum standards set out in GM/TT0146, where these are higher than the requirements of BS EN 115 :1995.

In the design of the approaches and exits from escalators and passenger conveyors, sufficient barriers shall be installed to control the flow of passengers and to prevent congestion in areas where cross flow of passengers can take place.

- For maintenance / inspection purposes, a portable control device shall be provided which enables the escalator or passenger conveyor to be run at a manually controlled slower speed, which shall not be greater than 10% of the rated speed.
- All electrical wiring and cables shall be installed in accordance with GM/RT1101.
- When escalators and passenger conveyors are installed at stations where the railway tracks are provided with 25kV A.C. electrification equipment, the requirements of GM/TT0107 shall be complied with.
- When escalators and passenger conveyors are installed at stations where the railway tracks are provided with 750V D.C. electrification equipment, precautions shall be taken against stray D.C. currents.
- Whilst all the operation and maintenance information for the escalator or passenger conveyor shall be obtained from the manufacturer of the equipment, the owner shall provide the person responsible for the operation of the station with sufficient easily understood information to enable the person to undertake their duties concerned with the operation of the equipment, including emergency procedures.
- Records of registration and periodic examination shall be kept in accordance with GM/RT1251.
- All machine rooms and machinery compartments shall comply with the requirements of GM/TT0136. A telephone shall be provided in the machines rooms of all remote type escalators.

1.1 Fire Requirements Sub-surface Stations

All escalators and passenger conveyors installed at stations where the platforms are underground or enclosed, shall comply with The Fire Precautions (Sub-surface Railway Stations) Regulations 1989 and shall be fitted with fire detection and extinguishing systems as follows:

- a) a linear heat detector on each side of the truss for the whole length of the escalator or passenger conveyor;
- b) a smoke detection system in the top and bottom machine rooms and compartments;