



Periodic Inspection

Elevators, Escalators, Travelators & Car-Parking Systems

Introduction

Interior circulation in buildings is a complex activity. People & materials move throughout the building using Elevators, Escalators, Travelators and Car Parking systems. These equipment have become an integral part of life and play a major role in the success of a building as a place to work, live or receive service. They are part of every built environment like Multiplexes, Malls, Airports, Metros, Commercial Offices, Hotels, Educational Institutions, and Residential Complexes etc. and are no longer deemed a luxury. The efficiency of these equipment are measured based on uptime, safety and dependability.

It is critical that Elevators, Escalators, Travelators & Car-Parking Systems provided in buildings, factories or facilities for either carrying men or materials are thoroughly examined by competent inspection bodies at regular intervals and are certified that they are safe to use and are performing in line with the requirements mandated in the appropriate standards.

As a building owner or a lessee it is very important that the equipment is inspected often to identify snags for rectification and ensure user safety. Maintaining highest safety standards also means that you are fulfilling your legal responsibility of ensuring that the equipment is thoroughly examined for its safe use as well as you are honoring the commitment to your tenants / users by guaranteeing them reliable up-time of the equipment.

What happens in an Inspection?

Primarily the inspection follows the principle of prevention is better than cure model. Inspection is a systematic and detailed inspection of the Elevators, Escalators, Travelators & Car-Parking Systems and all its associated equipment by a competent inspector. Its aim is to detect any defects which are, or might become, dangerous, and for the Inspector to report them to the party that has commissioned the inspection and, if appropriate, the enforcing authority so that remedial action can be taken.

To determine the extent of the inspection, the inspector will assess the risks, considering factors such as the application of the equipment, frequency of usage and condition, the weight of loads to be carried, etc.

An inspection may include some testing, if the inspector deems it to be necessary. The Inspector will normally determine what tests are required, taking account of the relevant guidance and standards and the parties intending to appoint inspectors are recommended to insist on this approach. Inspections should be carried out at suitable intervals and may be done by a competent, trained and experienced person only. Inspections would normally include visual and functional checks by a third-party inspector along with tests that the inspector may consider necessary.

Periodic inspections should not be confused with preventive maintenance, although they have some elements in common. Preventive maintenance usually involves replacing worn or damaged parts, topping up fluid levels and making routine adjustments to ensure risks are avoided. While, periodic inspections may act as a check for ascertaining if that maintenance is being carried out properly, but is not intended to replace it.

Periodic inspection should include the following:

- Emergency Features
- Safety Features
- Prime Mover
- Control System
- Mandatory Compliances
- Mechanical Systems
- Electrical Devices
- Overload & Over Speed Detection Devices
- Electrical Devices (including earthing, earth bonding, safety devices, selection of fuses, etc)
- Braking Systems

This list is not exhaustive. More details can be found in the relevant codes & standards.

Role of the Building Owner or Persons Responsible for the VHT Equipment

If you are a lift owner or someone responsible for the safe operation of an equipment, then you are a duty bound under the law. This means that you have a legal responsibility to ensure that the equipment is thoroughly examined and that it is safe to use.

The responsibilities also include:

- maintaining the lift so that it is safe to use;
- ensuring that the lift is examined at frequent intervals;
- keeping record of any changes in the lift operating conditions which may affect the risk assessment;
- making relevant documentation manufacturer's instructions and maintenance records, drawings and specifications available to the inspector;
- acting promptly to remedy any defects;
- ensuring that all documentation complies with the regulations for operating license and record keeping;

Selecting a Competent Inspector

A competent inspector is someone who has sufficient technical and practical knowledge of the VHT equipment to be able to detect any defects and assess how significant they are. It is also important that the competent person is sufficiently **independent and impartial** to allow them to make an objective assessment of the equipment. For this reason, it is not advisable for the same person who performs routine maintenance or anyone who is part of the team that is directly responsible for the equipment to carry out the inspection, as they are then responsible for assessing their own work. You can approach an inspection body to conduct the inspection and you should ensure that they understand your requirement and have expertise in inspection of Elevators, Escalators, Travelators & Car-Parking Systems. Accreditation by the National Accreditation Board for Certifying Bodies (NABCB) to the relevant standard (ISO/IEC 17020:2004) is an indication of the competence of an inspection body.

How to decide if inspection is required?

An inspection may be required:

- after substantial and significant changes have been made to the equipment;
- in densely populated buildings;
- in buildings where there are frequent equipment breakdowns;
- where the maintenance process is suspect;
- following exceptional circumstances such as damage to, or failure of, the equipment, long periods out of use or a major change in operating conditions which is likely to affect the integrity of the equipment;

Inspection Frequency

The inspection may be planned in intervals of once in a month to once in a quarter depending on the nature of risk, site environment and the age & condition of equipment. The frequency can be mutually agreed between the inspector and the owner.

Action following notification of defects

The inspector is legally required to notify you immediately, through a report of key observations, following an inspection, of any defects which are, or could soon become, dangerous.

The inspector will issue a shutdown notice to notify you of a serious and significant defect of high safety risk and you should immediately take the lift out of service until the fault has been addressed. If you do not take the lift out of operation you will be in breach of the law since you will be putting to danger many lives.

The inspector may also notify you of defects which need to be made good within a certain timescale. In this case, you should take steps to have the defective equipment repaired or replaced within the specified time, and not use the lift after that time unless the defect has been satisfactorily remedied.

Documentation

The inspector is legally required to send you a written and signed report of the inspection report as soon as practicable. This should normally be within 28 days, but if there is a serious defect which needs to be addressed you should expect to receive the report much sooner.

The detailed report will contain key observations supported with photographs and should in general:

- identify the equipment examined (serial number, make, etc), the employer and the premises;
- give details of the persons present during the inspection;
- provide brief specifications of the equipment inspected;
- give performance rating on a 100 point scale;
- contain the condition of all emergency features;
- give details of the measurement tools used and their calibration;
- identify any defect which is or may become a danger to people;
- give the details of any repair, replacement or alteration required to remedy the defect;
- give details of any tests carried out;
- give details of the person carrying out the report and the person validating the report on their behalf;
- The report should contain details of two subsequent inspections side-by-side for comparison purpose in order to measure the performance of the service provider.
- Upon fulfilment of qualifying criteria, the inspector shall issue a certificate of inspection and place a sticker on the unit signifying that the equipment has been inspected.
- Upon completion of the cycle (agreed number of inspections), provide a consolidated report with performance graphs of individual equipment and pending points both critical and non-critical.

If the report does not contain all the information above, you should not accept it as this may not be a sincere effort and may not address the purpose.

Complaints & Appeals

It is very important that any inspection body should have adequate channels open and process specified to address customer/ client complaints. The complaints and appeals process must be clearly made public through their website and the issues should be sorted out in line with the specified process.

What Services can PAPL Corp Provide?

PAPL Corp can provide an independent, periodic inspection of your Elevators, Escalators, Travelators & Car-Parking Systems

Partnering with PAPL Corp ensures that, as a Building Owner or persons responsible for the VHT Equipment you are:

- Ensuring users and workers the safe provision and use of the equipment.
- Ensuring maintenance is carried out to a sufficient extent.
- Ensuring that the lift is examined at regular intervals in accordance with standards by a competent inspector.
- Acting promptly to identify and remedy any defects ensuring your equipment is safe to use.

- Ensuring that all documentation complies with the regulations and record keeping.
- Ensuring the involvement of a highly skilled and experienced team.
- Digital reporting of the inspection results.

Why choose PAPL Corp for your Inspections?

- We operate all India which means we can provide unrivalled responsiveness.
- All our engineers/ inspectors have relevant Inspection experience and are highly skilled and trained, which means you can have complete confidence in the thoroughness of our inspection process and the accuracy of our subsequent report.
- Our dedicated engineers/ Inspectors have conducted Inspections across all sectors of the built environment, which means we can ensure your equipment is compliant, safe and fit for purpose, regardless of its operating environment.
- We are specialists in the VHT Domain that covers Elevators, Escalators, Travelators & Car-Parking Systems. Our expertise is exclusive and are a leading inspecting and certification company, you can rest assured you are engaging with industry experts.
- We are an accredited inspection body, accredited to comply with ISO/IEC 17020:2012 which is an indication of our competence as an inspection body.

Further information

If you need further details or need our services, please write to us at info@paplcorp.com or call us at +919884507535 and we will be happy to assist you.