

In Hong Kong, most people use lifts to travel up and down buildings, whether getting to work or school, or to get home. It is plain to see that lift safety is very much part of the daily lives of all. The government, registered lift contractors, registered lift engineers and registered lift workers are not the only ones responsible for ensuring the safety of lifts. Those who have ownership of lifts (such as the owners of a building or the owners' corporation) or who have the management or control of lifts (such as the property management company or the works consultant) [hereafter referred to as "RP", short for responsible person for lifts], also have important roles to play. RPs are required to engage registered lift contractors and facilitate their work arrangements to ensure that the lifts comply with the requirements of the Lifts and Escalators Ordinance (Cap. 618) (the Ordinance), including:

- 1. Ensure that the lift and all its associated equipment or machinery are kept in a proper state of repair and in safe working order. Notify the registered lift contractor immediately for inspection and repair upon learning of any abnormal operation or damage to the lift;
- 2. Ensure that the lift is not used under the following circumstances:
 - When lift works concerning installation, major • alteration, demolition of the lift or lift works that are likely to affect the safe operation of the lift are being carried out:
 - When the lift does not have a valid use permit; and
 - When no resumption permit has been issued by the Electrical and Mechanical Services Department (EMSD) for the lift after a major alteration has been carried out.
- 3. Ensure that lift works concerning installation, major alteration or demolition of the lift, and lift works that are likely to affect the safe operation of the lift are carried out by a registered lift contractor. Besides, monitor the registered lift contractor to ensure that effective precautionary measures have been taken when lift works are conducted, so as to prevent other people from



entering the work area and thus causing danger;

- 4. Supervise the registered lift contractor, registered lift engineer or registered lift worker to ensure that details of lift works have been entered into the log-book, countersign the log-book to confirm that the works have been completed, and maintain the relevant records for at least the recent three years for inspection by the EMSD;
- 5. Co-ordinate with the registered lift contractor and registered lift engineer with regard to the arranged schedule for periodic maintenance/examinations, including:
 - Arrange periodic maintenance of the lift, including inspection, cleaning, oiling and adjustment by a registered lift contractor at least once at intervals not exceeding one month;
 - Arrange thorough examination of the lift and all its associated equipment or machinery by a registered lift engineer at intervals not exceeding one year. If the examination is in order, the registered lift engineer should issue a safety certificate to assist the RP to apply to the EMSD for a use permit for the lift; and





- Arrange thorough examination of the lift with load and all its associated equipment or machinery by a registered lift engineer at intervals not exceeding five years.
- Notify the EMSD in writing by using the specified form and 6. the registered contractor responsible for the lift of any lift incident within 24 hours of coming into knowledge of the incident. The RP may specify in the maintenance contract to assign the registered lift contractor to fulfil the above requirement according to the Ordinance. The RP may also consider working out with the registered lift contractor ways of communicating with each other in the event of an emergency to expedite communication with the relevant staff for conducting emergency repair and rescue work; and
- Keep the machine room, lift well and lift pit clean and 7 hygienic, and provide a good working environment and relevant equipment for the registered lift contractor to carry out maintenance work properly in order to ensure the normal operation of the lift.

In May 2019, the EMSD produced an information card outlining the main duties of RPs, which will be distributed to RPs for reference during lift inspections.

To enable the RPs for lifts and escalators to understand their duties under the Ordinance and how to manage the maintenance work of lifts and escalators, the EMSD has set up a dedicated webpage "Responsible

Corner" (https://www.emsd. Persons' gov.hk/en/lifts and escalators safety/ responsible_persons_corner/index. html) on its website to provide a onestop information platform to assist the RPs for lifts in properly managing



their lifts and improving lift safety. The "Responsible Persons' Corner" features rich content, covering such information as "Guidebook for Responsible Persons for Lifts", "Contractors' Performance Rating (CPR)", "Safe Use of Lifts/Escalators", "Maintenance Contract Price Figures for Lifts", "How to Select Suitable Registered Lift and Escalator Contractor for Maintenance Works" and "How to Manage the Maintenance Works Carried out by Registered Lift/Escalator Contractor", etc. for the RPs' reference.

However, in some older buildings, many lifts have been in service for longer years. Even if the safety requirements are met, such lifts may not be able to meet the current public expectations because they may be relatively dilapidated, with more wear and tear, or without installation of new safety components. With the continuous advancement in lift technology in recent years, building owners may install more comprehensive safety devices for aged lifts to optimise their operation and enhance comfort for passengers.

The Government has recently collaborated with the Urban Renewal Authority to implement the Lift Modernisation Subsidy Scheme (LIMSS) with the aim of providing financial assistance and technical support to building owners in need, in order to encourage more owners to plan and organise lift modernisation works,

thereby gradually enhancing the safety of aged lifts. The LIMSS covers the seven safety devices to be installed as recommended in the Guidelines for Modernising Existing Lifts. To understand more about the enhancement solutions for aged lifts, RPs for lifts may refer to the Guidelines for Modernising Existing Lifts and the Lift Modernisation Resource Corner in the Responsible

Persons' Corner on the EMSD website (https:// www.emsd.gov.hk/en/lifts_and_escalators_safety/ responsible_persons_corner/lift_modernisation_ resource_corner/index.html).



The responsibility to repair buildings falls on

building owners, while that to maintain and repair lifts rests with the RPs. Timely modernisation of lifts can not only bring benefits to buildings, but also make the users feel safer, more comfortable and rest assured when they embark on their vertical journey. 🚺

(Chinese version only)



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News - in- Brief Matters related to RPs of Lifts and Escalators

Special Maintenance and Log-Books with an Improved Format

The EMSD has introduced the requirements for special maintenance and log-books with an improved format in the Code of Practice for Lift Works and Escalator Works (2018 Edition). Lift contractors and RPs shall fully implement the following measures from 1 February 2019:

- (1) Contractors shall conduct special maintenance work at least twice every year for the important safety devices (including brakes, traction machines and landing doors) of aged lifts that have yet to undergo modernisation works. Furthermore, they are required to submit information about the scheduled date, time and inspection results of the special maintenance to the EMSD via an online platform. The EMSD will also step up the corresponding inspections; and
- (2) Contractors should record maintenance

work in log-books with an improved format to list the important safety devices or components involved in each round of maintenance to facilitate more effective monitoring of the contractors' maintenance work by the EMSD and the RPs for lifts

For frequently asked questions (and their answers) about special maintenance and log-books with an

improved format, please visit the following webpage: https://www.emsd.gov.hk/en/ lifts and escalators safety/responsible persons_corner/fag_enhancing_safety_ of_aged_lifts_short_term/index.html.

Electrical and Mechanical Services Trading Fund Engages Independent Registered Engineers

At present, the Electrical and Mechanical Services Trading Fund (EMSTF) is responsible for inviting tenders for services of qualified registered lift and escalator contractors relating to provision of maintenance services for lifts and escalators of various government departments and public organisations, as well as management of relevant maintenance contracts. As required in the contracts, contractors shall engage a registered lift/escalator engineer to carry out periodic examinations of lifts/escalators, and apply to the Director of Electrical and Mechanical Services for a use permit on behalf of the RPs for the lifts/escalators.

To further enhance the effectiveness of contract management and the safety of lifts and escalators, the EMSTF has planned to adopt improvement measures to ensure the independence of periodic examinations. A pilot scheme will be implemented by phases, under which the EMSTF will engage independent registered engineers, or contractually require the contractors to appoint independent registered engineers, to replace the registered engineers employed by the contractors to carry out periodic examinations for some lifts and escalators maintained by the contractors, and apply to the Director of Electrical and Mechanical Services for a use permit.

Like other projects, the pilot scheme aims to facilitate registered lift and escalator engineers in

carrying out periodic examinations for lifts and escalators independently and offering professional and independent judgement on their condition and operational safety, thereby effectively promoting recognition of the examination results by RPs and members of the public, alleviating public concern about lift and escalator safety as well as enhancing the professional image of registered lift and escalator engineers. The EMSTF has successively liaised with various contractors to discuss the implementation details with a view to achieving a winwin situation.

At the same time, in order to assist the RPs for lifts/escalators in engaging independent registered lift/ escalator engineers to provide relevant professional services, the EMSD uploaded the contact information of the registered lift/escalator engineers concerned onto the "Other Reference Information" section in the "Responsible Persons' Corner" webpage (https://www.

emsd.gov.hk/en/lifts_and_escalators_ safety/responsible_persons_corner/index. html) in May 2019 and will update the information as appropriate.





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News in-Brief

Matters related to RPs of Lifts and Escalators

Expand and Enhance the Lift Modernisation Subsidy Scheme

In the 2018 Policy Address, the Chief Executive stated that the Government planned to launch the Lift Modernisation Subsidy Scheme (LIMSS) with a provision of \$2.5 billion to provide financial incentives and appropriate professional support to building owners in need for modernisation of about 5 000 aged lifts. The LIMSS was launched in the first quarter of 2019 and the response was very encouraging, with a total of about 1 200 applications received involving about 5 000 eligible lifts. Applicants of the first-round applications for the LIMSS have been notified of their application results in the fourth quarter of 2019.

In view of the overwhelming response from the society to the LIMSS, the Government plans to inject an additional \$2 billion into the LIMSS to expand its coverage by subsidising 3 000 more aged lifts on top of the original target of modernising 5 000 lifts. In other words, the expanded LIMSS will modernise a total of about 8 000 aged lifts with a provision of \$4.5 billion. This can not only benefit more building owners in need, but also speed up the modernisation of aged lifts so as to enhance lift safety. We plan to invite second-round applications in early to mid-2020 with a view to

notifying eligible applicants the priority of their applications in the fourth quarter of 2020. For more details please visit: https://brplatform.org.hk/en/subsidy-andassistance/limss



On the other hand, as the residents' entry to and exit from the buildings will inevitably be affected during lift modernisation works especially for buildings with a single lift or floors served by one lift only, some building owners may refrain from carrying out modernisation works. In view of this, the Government proposes that the LIMSS be enhanced through provision of outreach services to needy residents (e.g. the aged and the disabled) by non-government organisations engaged by the Urban Renewal Authority, for example delivery of food and meals, purchasing daily necessities on their behalf and provision of stair-lift services, so as to reduce the inconvenience caused by the modernisation works to them.

At the same time, the EMSD will collaborate with the Construction Industry Council (CIC) to include the lift trade in the existing Intermediate Tradesman Collaborative Training Scheme for the construction sector. The EMSD will discuss with the CIC the details of the training scheme for the lift trade in the hope that the training scheme will attract new blood to join the lift trade so as to increase the labour force of the industry for handling additional modernisation works.



Matters related to Lifts and Escalators Trade

Code of Practice on the Design and Construction of Lifts and Escalators (2019 Edition)

To complement the implementation of the Lifts and Escalators Ordinance in 2012, the Code of Practice on the Design and Construction of Lifts and Escalators (CoP) (2012 Edition) was introduced the same year mainly to provide guidance to trade practitioners. It specifies that the design and construction of lifts and escalators and their associated equipment or machinery shall comply with the technical details, methods, procedures and safety requirements as required under the Ordinance.

News in-Brief

In September 2017, the new EN81-20/50 standard was officially introduced by the European Committee for Standardization to supersede the old EN81-1 and EN81-2 standards. The new standard aims to further enhance the reliability, safety and comfort of lift services. To ensure that the design requirements of local lifts are in line with the latest international standards, the EMSD has made reference to the above new standard when revising

the old CoP. The new edition of CoP (i.e. 2019 Edition) mainly replaces the design and construction requirements for electric and hydraulic lifts (i.e. Parts 1 and 2 of the CoP) with most of the provisions of the new EN81-20 standard, retains the local requirements, and incorporates past revisions and addenda.

The new edition of CoP was gazetted on 30 August 2019 and will come into effect on 1 June 2020, i.e. with an approximate nine-month grace period to allow sufficient time for preparation by the trade. Members of the public can access the new CoP at the General Legislation Division of the EMSD, and may also purchase it from the Publications Sales Unit of the Information Services Department at the North Point Government Offices.

Produce Promotional Video Clips to Attract New Blood to the Trade

In order to attract more young people to the lift and escalator trade, the EMSD produced and uploaded to its website a series of four promotional video clips entitled "Path for Development" in 2018. The video clips allow more people to understand the job nature of the lift and escalator trade, relevant technological development, career ladder and trade leaders' perception of the prospects of the trade, so as to encourage interested people to join the trade. Besides, with young people as the target of publicity and promotion, the EMSD produced a 30-second advertising video clip using the above series of promotional video clips, which was broadcasted in the form of advertisement on online social platforms.



Path for Development - A Day of an Engineer: https://www.youtube.com/watch?v=aOLp5aSais8



Path for Development - Promotion Opportunities https://www.youtube.com/watch?v=bxc4wyEL9W8





Path for Development - Job Nature https://www.youtube.com/watch?v=rg8DIW0-YmA



Path for Development - Registration https://www.youtube.com/watch?v=lu4MK-OENT0



News

Brief Matters related to Lifts and Escalators Trade

Lift/Escalator Works Safety Enhancement Competition

The EMSD organises a lift/escalator work safety enhancement competition every two years to encourage the management, frontline staff, members or trainees of relevant organisations in the lift and escalator trade to take the initiative to enhance and improve lift/escalator work safety. The EMSD adopted video production as the form of competition for the first time in 2018/19, hoping to strengthen the occupational safety awareness of frontline staff. The award presentation ceremony of the competition was held in March 2019. 🚯



Pictured is the Director of Electrical and Mechanical Services with the judges, guests, participants and audience in the final.





Participating teams present their entry to a live audience.

Produce Virtual Reality Safety Training Kit

To enhance the training for lift maintenance workers, the EMSD worked with the Lift and Escalator Contractors' Association and the Vocational Training Council to produce a set of virtual reality safety training kit for the trade. The first batch of virtual reality training modules, launched in March 2019, covers the correct procedures for entering, leaving and working on lift car tops. It provides a safe environment in which trainees can experience these scenarios and familiarise themselves with the safety procedures that must be observed.

the virtual reality safety training.

Electrical and Mechanical Services to know more about





Pictured is the Director of Electrical and Mechanical Services with the representatives of registered lift contractors and the guests from the trade at the Kick-off Ceremony of Virtual Reality Training in Lift Works Safety.



Other Matters

Recent Prosecution and Disciplinary Cases

Over the past year the EMSD initiated prosecution against a total of eight registered persons suspected of contravening the Lifts and Escalators Ordinance. The contraventions involved failure to ensure that lift works were carried out properly and safely; failure to submit detailed investigation reports on incidents concerned and notification of the subcontracting of lift maintenance works within the specified period; failure to ensure that prior to obtaining the type approval in relation to a particular safety component, lift works involving that component were not carried out; and failure to ensure that the lifts concerned were thoroughly examined by registered lift engineers. Here are some of the cases:

Case 1

During an inspection of the lifts in a housing estate in Tai Wai in May 2018, the EMSD found the overspeed governors of two lifts not functioning. The registered lift contractor involved was prosecuted for failure to ensure that the lift works were carried out properly and safely. The defendant pleaded guilty to two counts of failing to comply with the Lifts and Escalators Ordinance and was fined a total of HK\$100,000 upon conviction.

Case 2

In May 2018, a lift in a housing estate in Sheung Shui moved upwards unintentionally while its doors were opened, causing the death of a passenger. The EMSD initiated prosecutions against the registered lift contractor involved and its general manager and maintenance manager for failure to ensure that the lift works were carried out properly and safely, and failure to submit notification of the subcontracting of lift maintenance works within the specified period. All the three defendants pleaded guilty to the breach of the Lifts and Escalators Ordinance, and were fined HK\$63,000, HK\$33,000 and HK\$40,000 respectively upon conviction.

In addition, the Disciplinary Board completed disciplinary hearings on the performance of a registered lift contractor in March 2019. The case revealed that two disciplinary offences were involved. At the time of the offences, the contractor, as the registered lift contractor responsible for lift maintenance for a building in Sham Shui Po, did not supervise the carrying out of the maintenance of the traction machine gearbox by its workers so as to confirm that relevant measures and instructions had been implemented and observed, and did not provide sufficient training and instructions for its workers to enable them to properly carry out the maintenance of the traction machine gearbox. The Disciplinary Board decided that the contractor shall be disciplined for misconduct and negligence that contravened relevant provisions of the Lifts and Escalators Ordinance. The contractor had to pay a fine totalling HK\$80,000 as well as the costs and expenses of the disciplinary proceedings amounting to HK\$132,061.

Guidelines on Safety of Lift Shaft Works

published by the Construction Industry Council

The Construction Industry Council (CIC) issued the Guidelines on Safety of Lift Shaft Works (Volume 3 – Throughout the Occupation Stage of Building) (2nd Edition) "Guidelines" in August 2019. The Guidelines focus on the precautionary measures recommended to the trade for enhancing the safety of lift works throughout the occupation stage. Besides, in order to further enhance the safety of lift work, some safety measures have also been included in the Guidelines, e.g. measures for verifying the effectiveness of emergency stop devices and the interlock systems of landing doors and lift doors.

The review and updating of the Guidelines were carried out by a working group set up by the Task Force on Site Safety of Working in Lift Shafts under the Committee on Construction Safety, with members including representatives from the EMSD, the Labour Department, the Occupational Safety and Health Council, the Occupational Health and Safety Association, the Lift and Escalator Contractors' Association, the Hong Kong Union of Lift and Escalator Employees, and the CIC Secretariat. Besides, reference has been made to the Code of Practice for Lift Works and Escalator Works (2018 Edition) issued by the EMSD in updating the Guidelines.

The good practices recommended in the Guidelines aim to enhance work safety of site personnel working near or inside a lift shaft throughout the occupation stage. The CIC expects all members of the trade to adopt the recommendations of the Guidelines and to adhere to the standards or procedures therein at all times.

The Guidelines can be downloaded from the CIC website (http://www.cic.hk).



CONSIDER AND

GUIDELINES



Other Matters

Best Management Practices on O&M for Lifts and Escalators – published by BSOMES



While a poster reads "taking the stairs every day makes you healthy and happy", most Hong Kong people bury themselves in their work every day and lack exercise. In view of this, whenever I have some spare time, I will echo this slogan and try to walk from the lobby on the ground level to over 20 floors. Every time I am sweating heavily and feel exhausted, I will imagine myself to have become a winner of an Academy Award, and would like to express my gratitude to those heroes behind the scenes who have made tremendous efforts, including lift engineers, designers, registered lift contractors, operation and maintenance personnel, etc. Thanks to their endeavour, from research and development, installation, design to maintenance of lifts and escalators, passengers can be transported up and down in lifts and escalators every day. There is some three million working population in Hong Kong, and the average number of times that a person uses lifts or escalators per day is estimated to be as many as ten times or more. This shows that lifts and escalators are an integral part of Hong Kong people's lives.

I often hear people say that there is not much difference between human beings and machines. Both have complex systems, need to rest and require careful maintenance. No matter how advanced and innovative the design of a machine is, regular inspection, maintenance and testing are indispensable. To better regulate the safety of lifts and escalators, the Lifts and Escalators Ordinance (Cap. 618) came into full operation in December 2012 to replace the Lifts and Escalators (Safety) Ordinance (Cap. 327). One of the new provisions is addition of the role of "responsible persons" to strengthen their responsibility in managing and controlling lifts and escalators.

Too help the trade, community and responsible persons of the relevant industry discharge their important duties and tasks, and to provide them with a deeper understanding of the scope and principles of work covered, the Building Services Operation and Maintenance Executives Society (BSOMES) has established a volunteer team of more than 20 members who are engaged in technical, operational and maintenance work, including experienced practitioners from relevant government departments, universities, engineering consultants, manufacturers, contractors as

well as property and facility management companies. The team has spent over three years conducting and organising dozens of technical management discussions and workshops as well as gathering the views of many responsible persons and government organisations in order to compile, by integration with professional and practical knowledge, the regulatory and implementation requirements of the relevant legislation and the actual work experience and procedures into the Best Management Practices on O&M for Lifts and Escalators (Practices).

The Practices were published this October. My special thanks go to the EMSD for the technical support provided and the valuable comments given during the preparation of the Practices. The BSOMES is convinced that the Practices will enable the trade, practitioners, management personnel and registered contractors to communicate and collaborate more effectively, thereby providing better quality, safer and more efficient lift and escalator services to the community.

Ir Sr LEE Man-kwong

Chairman of Best Management Practices on O&M for Lifts and Escalators Building Services Operation and Maintenance Executives Society

Feedback

Your comments and suggestions, whether on editorial style or contents, are most welcome. Tell us how we can improve and make the Lifts and Escalators Newsletter a truly informative and interesting publication for you. The Lifts and Escalators Newsletter is available on our website at http://www.emsd.gov.hk.

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