




LIFT & 電梯通訊

ESCALATOR NEWSLETTER

Feature Article

How Responsible Persons of Lifts Can Better Cope With Typhoons?

Typhoons' Impact on Lift Operation

On the annual weather outlook for Hong Kong in 2020, the Hong Kong Observatory predicted that the tropical cyclone season may start in or after June in Hong Kong this year. It is expected that there will be four to seven tropical cyclones coming within 500 kilometres of Hong Kong this year, which is normal. The tropical cyclones will lash the city with strong gusts interfering outdoor power supply lines and leading to power supply instabilities. The likelihood of lift service suspension and passenger entrapment would increase under such conditions. Timely rescue of entrapped lift passengers is often a serious challenge amidst passage of a typhoon or heavy rainstorm as roads may be flooded or blocked by fallen trees, hampering rescuers from accessing the passengers in predicament.

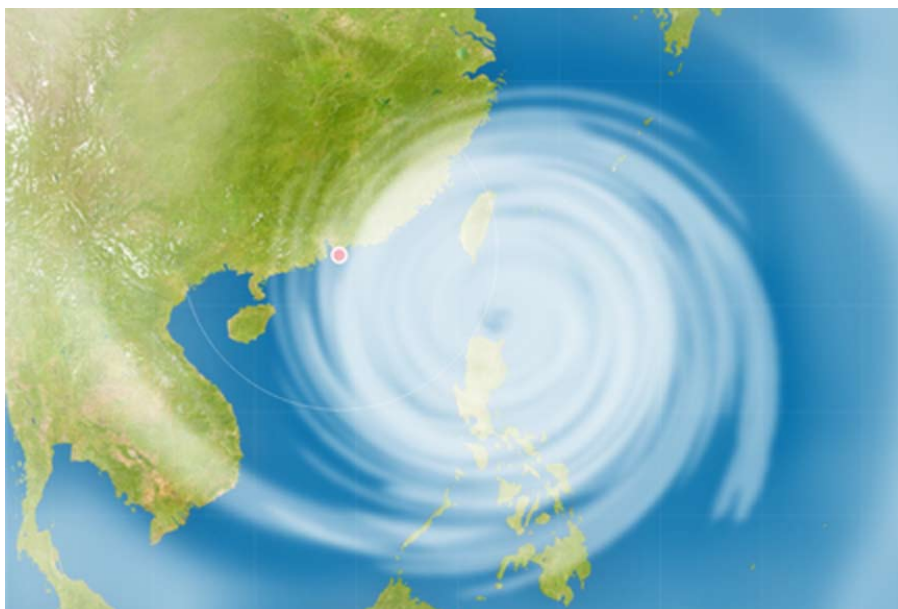
The torrential rains accompanied by typhoons pose significant concerns to the operation of lifts as rainwater may enter lift machine rooms through ventilation louvres, in particular broken ones, to shower the lifts' machinery. Equipment in the lift pit, on the other hand, is most vulnerable when surface water pours or seeps through the landing doors into the lift pit. Apart from the potential danger of electrocution, extensive damage necessitating substantial and expensive repair could result if the machinery of a lift comes into contact with water.

To minimise the aforementioned risks, pertinent actions should be taken by responsible persons for lifts (RPs). The following paragraphs set out the recommendations on appropriate measures that can be adopted by RPs to cope with the passage of typhoons.

Before the Typhoon Season:

To mitigate water ingress into lift machinery, the following preventative measures are recommended before the typhoon season:

- Install weatherproof louvres at ventilation openings of the lift machine room;
- Install a flood barrier or gate at the entrance of the lift machine room;
- Install weatherproof covers / shields to the control panel / motor parts / components inside the lift machine room;
- Install a flood alarm at the lowest point of the lift pit for transmission of warning alerts to a 24-hour security guard post;
- Install a sump pump at the lift pit to expedite water drainage; and
- Regularly touch up / repaint the lift pit, compensation ropes and



(Simulated picture)

components that have a high chance of exposure to water.

When Typhoon Is Approaching:

In preparation for an approaching typhoon, the following temporary measures are recommended:

- Conduct final inspection and testing of the sump pump and flood detection / alarm device (if any) in the lift pit;
- Wooden boards may be used to enclose openings that may be hit directly by the typhoon; and
- If the lift is located in a coastal or low-lying area, sand bags should be placed in an appropriate position outside the landing doors on the ground floor or outdoors to prevent ingress of rainwater into the lift pit.

When Typhoon Signal No. 8 or Above Is Hoisted:

To avoid passenger entrapment due to unstable power supply, use of lifts should be avoided as far as possible. RPs should consider maintaining operation of a minimum number of lifts (residential buildings may only maintain operation of one lift for emergency use). The doors of lifts in suspension should be closed and fenced

off with appropriate notices to prevent passengers from accidentally entering the lift car.

After Passage of Typhoons:

Before resumption of lift services, where it is safe, RPs should inspect lift machine rooms and landing doors below ground level to ensure that the lifts are in a safe state to operate. If there are signs of flooding, damage or other abnormalities, RPs should suspend operation of the lift and notify a registered lift contractor to carry out thorough inspection and necessary corrective maintenance as soon as possible to ensure that the lift can operate safely.

(Contributed by the Building Services Operation and Maintenance Executives Society) 



Feature Article


Audit of Registered Lift / Escalator Contractors

The Electrical and Mechanical Services Department (EMSD) conducts audits on all registered lift / escalator contractors every two years to ensure that they comply with the registration requirements and have the necessary facilities, resources and manpower for carrying out various lift / escalator works. The EMSD completed the latest round of audits in 2019, confirming that all the contractors complied with the registration requirements. The EMSD also made use of the occasion to make recommendations to some contractors on good management practices with a view to enhancing their service quality and work effectiveness. The following are some recommendations on good operational practices:

- (i) Keep and back up technical manuals, drawings, training records and relevant documents more systematically in the form of electronic records instead of paper, making it more convenient to store, share and search for information while saving space;
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- (ii) Provide appropriate manuals on emergency response procedures for engineering workers and establish a comprehensive notification mechanism;
 - (iii) If a contractor has yet to draw up any written policy or workflow for undertaking lift / escalator works, it should develop a systematic process for assessing the availability of human resources, technical support and facilities to undertake lift / escalator works;



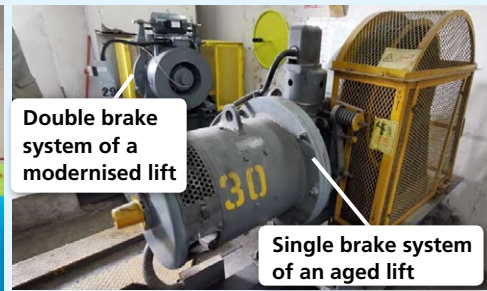
- (iv) Deploy suitable manpower and make arrangements before taking over a new maintenance contract, with a view to completing examination of the lifts / escalators concerned and submitting a report within two weeks after taking over the maintenance works;
- (v) Conduct regular training for staff, including explaining the importance of and criteria for filling out logbooks;
- (vi) The supervisor should inspect the maintenance works from time to time to ensure the quality of works and provide appropriate support to frontline engineering workers;
- (vii) Develop and use a computer system for the sake of job dispatch, and prepare a shift roster for engineering workers according to an appropriate ratio between workers and lifts / escalators; and
- (viii) Keep electronic records of the training information of each staff member to facilitate future training arrangements.

If the EMSD finds, upon completion of the audit, that a contractor has inadequacies, it will recommend improvement measures to the contractor and will also take follow-up action to ensure that improvements have been made. 


Latest Progress of the Lift Modernisation Subsidy Scheme

The EMSD has been encouraging owners of aged lifts to actively consider modernising their lifts because lift modernisation can make the lifts safer, more comfortable and reliable. In 2019, the EMSD collaborated with the Urban Renewal Authority (URA) to launch the Lift Modernisation Subsidy Scheme (LIMSS) to provide appropriate support to private building owners in need to modernise their aged lifts.

Following the close of the first-round applications of the LIMSS and completion of prioritisation, the URA has, since March 2020, started to assign consultants to assist the owners of those 1 400 lifts with a higher priority to plan modernisation works as soon as possible, and to disburse subsidies to them. At the same time, the URA, together with a social welfare organisation, is also conducting a study, hoping to provide outreach services to needy residents who are affected by lift modernisation works and find it inconvenient to enter and exit their buildings, so as to reduce the inconvenience caused by the modernisation works to them. Examples of such services include delivery of food and meals, purchasing daily necessities on their behalf, provision of stair-lift services, etc. The services will be rolled



out in phases upon completion of the study and finalisation of the details.

The second-round applications of the LIMSS commenced on 6 January 2020 and will close on 30 September 2020. The application results are expected to be announced in the fourth quarter of 2020. For more details about the LIMSS and application procedures, please visit <https://brplatform.org.hk/en/subsidy-and-assistance/limss>. 



Little Things Matter, Be Careful When Riding Escalators




New TV API launched by the EMSD in 2020

Escalator is an indispensable means of transport. To ensure escalator safety, appropriate maintenance and periodic inspection are essential, but proper use of escalators by passengers is equally important. Last year, the EMSD received reports of a total of 1 771 escalator incidents, of which 96% were related to passenger behaviours, including losing balance and falling while walking on escalators. This shows that proper use of escalators is indeed worthy of attention. So what exactly is the correct way to use escalators? In particular, should passengers walk on escalators? Is "standing still" safe enough?

Members of the public have been holding different views on this issue. Some people think that, given the rapid pace of life in Hong Kong, the practice of "walking on the left and standing on the right" can make room for people who are in a hurry to keep moving on escalators. On the other hand, some support putting safety first. For their safety and the safety of other passengers, they always "stand still", stand firm and hold the handrail tightly when travelling on escalators. They never walk on escalators as this may cause accidents.

As the rise of escalator steps is generally higher than that of staircase steps and changes during escalator operation, passengers are more prone to slip and trip when walking on escalators, thus causing accidents. On the other hand, passengers walking on escalators tend not to hold the handrail tightly because they are walking. If the escalators stop suddenly in case of emergency, they will be prone not only to fall by loss of balance but also to bump into other passengers, thus causing more serious incidents. Therefore, the EMSD recommends that when using escalators, passengers should hold the handrail tightly, stand on either side of escalator steps, exercise due vigilance, and refrain from giving undivided attention to mobile phones.

To further promote safe use of escalators, the EMSD also launched a new series of Announcements in the Public Interest (APIs) on TV and radio and posters in March 2020, encouraging passengers to "stand on either side and hold the handrail" and reminding them of the points to note when travelling on escalators. The TV APIs can be viewed on the EMSD YouTube channel.

<https://www.youtube.com/watch?v=B9cNPI2aO24> 



New promotional posters launched by the EMSD in 2020

News **-in-** Brief

Optimise the Process of Resuming the Use and Operation of a Lift or an Escalator after Major Alteration



After the completion of modernisation or major alteration in respect of a lift or an escalator, the RP for the lift / escalator shall appoint a registered lift / escalator engineer to carry out an examination and submit an application for a resumption permit (Form LE7) to the EMSD. Upon receipt of the application, the EMSD will review the report on the alteration and examination of the lift / escalator. If the lift / escalator is confirmed to be in safe working order, a resumption permit allowing it to resume operation will be issued.

However, suspension of lift / escalator services during the course of modernisation or major alteration and while pending approval would inevitably cause inconvenience to users. To enable speedy resumption of the services of the lifts / escalators which have completed modernisation or major alteration, the EMSD has put in place the following measures:

- 1) Strengthen collaboration with registered lift / escalator contractors to arrange examinations as soon as possible for early resumption of lift / escalator operation.
- 2) Increase manpower to process resumption permit applications before long holidays, and expedite the

approval process to enable resumption of lift / escalator operation before such holidays as far as possible.

- 3) A new electronic booking platform was established in June 2020 (<https://le7.emsd.gov.hk/le7-ext/>). This easy-to-use platform will allow RPs and registered lift / escalator contractors to make appointments with the EMSD for the approval of lifts/escalators that have completed modernisation or major alteration, thereby facilitating work planning and scheduling by contractors in a bid to minimise the time required for suspension of lift / escalator services.
- 4) When making an appointment via the above electronic platform for homes for the elderly, hospitals, other premises where public services are provided, and buildings equipped with only one lift, RPs and registered lift / escalator contractors may select a more flexible date such that they can be precise with the time for resuming lift / escalator services, thereby minimising the impact on users. 🔄



The new electronic booking platform established in June 2020



Quality Lift Service Recognition Scheme

To strengthen the capabilities of responsible persons (RPs) for lifts of private buildings in lift management and encourage RPs to enhance the safety level, reliability and comfortability of existing lifts through modernisation measures, the EMSD has launched a new Quality Lift Service Recognition Scheme (Scheme). It is a voluntary scheme targeting RPs for lifts (including owners, owners' corporations and property management companies) of private buildings (including residential buildings, industrial and commercial buildings, shopping malls and hotels), and participation is on a housing estate or building basis.

The assessment criteria of the Scheme are as follows:

- A. level of lift modernisation
- B. record of lift operation
- C. performance of RPs in managing lift services

Qualified RPs will be presented with gold / silver / bronze awards or certificates of excellence / merit according to their scores and the assessment aspects selected, in recognition of their contribution in lift modernisation and the continued provision of quality lift management services.

For details of the Scheme, please visit the website of the Quality Lift Service Recognition Scheme.

https://www.emsd.gov.hk/tc/lifts_and_escalators_safety/responsible_persons_corner/qlsrs/index.html (Only Chinese version available)

For further enquiries about the Scheme, please email qlsrs@emsd.gov.hk or call 1823. 🔄



Maintenance Price Figures for Lifts at Private Premises



Following the recommendations of the Lift and Escalator Safety Advisory Committee, the EMSD has released results of the average monthly maintenance contract price survey on lifts at private residential and commercial premises since November 2014 and May 2015 respectively. The purpose of releasing the price figures is to provide the public with a reference to help them understand the maintenance costs of lifts at private residential and commercial premises in terms of compliance with specific maintenance service requirements. In engaging a lift contractor to provide maintenance service for the lifts, the public may make comprehensive consideration and the right choice with reference to the price information, so as to ensure the safety of lift operation. The latest price information will be

uploaded to the EMSD website on a half-yearly basis.

The EMSD had earlier engaged a consultant to conduct a new round of survey, the results of which were uploaded to the Responsible Persons' Corner on the EMSD website in May 2020 (https://www.emsd.gov.hk/en/lifts_and_escalators_safety/responsible_persons_corner/index.html). Based on the data from some 7 600 lifts at about 1 760 locations collected, the consultant calculated the average monthly maintenance costs of lifts as follows:



Private Residential Premises

Lift travel level	Rated speed	Average monthly maintenance cost	Changes as compared with the last survey (Note 1)
1 to 15	≤ 1.0m/s	\$4,127	+1.5%
	> 1.0m/s	\$5,034	+3.3%
16 to 25	≤ 1.5m/s	\$4,714	+4.6%
	> 1.5m/s	\$5,993	+6.0%
26 to 35	≤ 1.75m/s	\$5,752	+3.3%
	> 1.75m/s	\$7,498	+3.2%
More than 35	≤ 2.5m/s	\$8,053	+0.1%
	> 2.5m/s	\$8,892	+0.5%

Note 1: The above price figures were updated on 31 March 2020, whereas the previous price figures were updated on 30 September 2019.

Private Commercial Premises

Lift travel level	Rated speed	Average monthly maintenance cost	Changes as compared with the last survey (Note 2)
1 to 15	≤ 1.5 m/s	\$5,285	+2.8%
	> 1.5 m/s	\$7,525	+2.7%
16 to 25	≤ 2.0 m/s	\$6,484	+0.1%
	> 2.0 m/s	\$10,773	+2.8%
26 to 35	≤ 3.0 m/s	\$8,511	+2.3%
	> 3.0 m/s	\$13,937	+5.6%
More than 35	≤ 3.5 m/s	\$14,314	+2.8%
	> 3.5 m/s	\$21,548	+0.9%

Note 2: The above price figures were updated on 31 March 2020, whereas the previous price figures were updated on 30 September 2019.

The release date of the results of the next survey is tentatively scheduled for the end of November 2020. ▶◀

News -in- Brief

Registered Contractors' Performance Rating

In April 2020, the EMSD announced the performance ratings of registered lift and escalator contractors for the past 12 months (from April 2019 to March 2020). A total of 36 registered lift contractors and 25 registered escalator contractors were awarded the Safety Star. Among them, 18 registered lift contractors and 18 registered escalator contractors had not been found non-compliant with the safety and maintenance requirements as reported in the last two consecutive announcements of performance results, and were therefore given the highest performance rating of five Quality Stars.

The Registered Contractors' Performance Rating (CPR) System is based on a scheme of performance monitoring points. The CPR


system reflects the performance of registered contractors in the safety and service quality aspects of lift / escalator works conducted, with the aim of providing a fair and transparent rating system for public reference. For more details about the Rating System, please visit the following website:

https://www.emsd.gov.hk/en/lifts_and_escalators_safety/publications/contractors_performance_rating/index.html 



Review and Improve the Registered Contractors' Performance Rating System

Since the implementation of the CPR system in 2009, the System has been revised seven times, which include (i) addition of performance ratings for registered escalator contractors in 2011, (ii) conversion to a star rating system for presenting the performance ratings of registered contractors in 2014, (iii) revision of the calculation method, and (iv) additions / revisions to the performance monitoring (PM) point items for three times. The latest revision was implemented in February 2018.


The EMSD will review and improve the System from time to time, and is now conducting the eighth revision review, in which new PM point items such as cleanliness and tidiness of working environment are expected to be added, so that the System can reflect the performance of registered contractors more fully and accurately. It is expected that the revision and consultation work will be completed in the second half of 2020. 

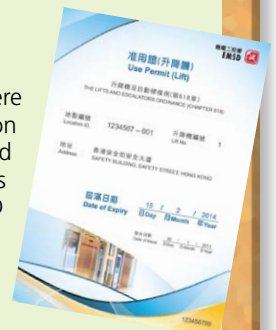
Recent Prosecution Cases

Over the past year, the EMSD issued a total of 16 summonses to initiate prosecution against eight persons / companies suspected of contravening the Lifts and Escalators Ordinance (Ordinance). The contraventions involved included the following:

- (i) The RPs for some lifts failed to fulfill their statutory duties;
- (ii) A registered escalator engineer submitted false or misleading documents;
- (iii) A RP for a lift operated the lift in contravention of a prohibition order; and
- (iv) A registered lift worker knowingly permitted other persons to use or operate a lift which was not issued with a resumption permit after a major alteration was made in respect of the lift.

Of the above-mentioned 16 summonses, ten involved RPs for lifts suspected of contravening the provisions of the Ordinance

by failing to ensure that valid use permits were displayed at all times in a conspicuous position in the lift cars. Among the completed prosecution cases, the penalties included fines ranging from \$900 to \$1,200. The EMSD takes this opportunity to remind RPs for lifts / escalators to display valid use permits for lifts / escalators at all times in a conspicuous position in accordance with the provisions of the Ordinance. RPs shall also ensure that no one can use or operate lifts / escalators without valid use permits. In this connection, RPs for lifts / escalators should apply for and replace the use permits timely, and ensure that valid use permits are displayed in a conspicuous position of the lifts / escalators. Furthermore, RPs for lifts / escalators should inspect the lifts / escalators from time to time to check whether the validity period of the use permits has expired. If it is found that the validity period of the use permits has expired, all reasonable steps should be taken as early as possible to prevent the use or operation of the lifts / escalators. 



Feedback

Your comments and suggestions, whether on editorial style or contents, are most welcome. Tell us how we can improve and make the Lift and Escalator Newsletter a truly informative and interesting publication for you. The Lift and Escalator Newsletter is available on our website at <http://www.emsd.gov.hk>. Please contact us should you need a printed copy.

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