Guidebook for Responsible Persons for Escalators

Lifts and Escalators Ordinance (Chapter 618)

General Legislation

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In Hong Kong, most people have to use escalators to travel up and down buildings, whether getting to work or school, or to get home. It is easy to see that escalator safety is very much part of the daily lives of all. The government, registered escalator contractors, registered escalator engineers and registered escalator workers are not the only ones responsible for ensuring the safety of escalators. Those who have ownership of escalators (such as the owners of a building or the owners’ corporation) or who have the management or control of escalators (such as the property management company or the works consultant) [hereafter referred to as “responsible persons for escalators”], also have important roles to play.

This Guidebook for Responsible Persons for Escalators sets out in a Q&A format the responsibilities of the responsible persons for escalators under the Lifts and Escalators Ordinance (Cap 618) (hereafter referred to as “the Ordinance”) and the Lifts and Escalators (General) Regulation (hereafter referred to as “the General Regulation”), and other matters relating to escalator maintenance works. Its aim is to ensure that the responsible persons for escalators can effectively keep their escalators in a proper state of repair and in safe working order.

This Guidebook is for reference use only. The content of all legal clauses mentioned must be read in the original context of the relevant ordinances.

Disclaimer
This Guidebook, which is prepared by the Electrical and Mechanical Services Department (EMSD), seeks to outline in layman’s terms the responsibilities of the responsible persons for escalators under the Lifts and Escalators Ordinance (Cap 618) and other matters relating to escalator maintenance works. The legal provisions referred to in this Guidebook shall be construed in accordance with the Lifts and Escalators Ordinance (Cap 618).

This Guidebook is for general reference only. Users of this Guidebook should not rely on the information as professional legal advice and are strongly advised to seek assistance from lawyers should there be doubts about the application of the Lifts and Escalators Ordinance (Cap 618) in individual circumstances. Whilst every effort has been made to ensure the accuracy of the Guidebook, EMSD shall not be responsible for any liability howsoever caused to any person by the use of or reliance on this Guidebook.
The escalators\(^1\) regulated by the Ordinance and lawfully used in Hong Kong roughly fall into the following 2 categories:

1. According to section 2 of the Ordinance, escalator means an inclined, continuous stairway that is driven by mechanical power for raising or lowering passengers; or a passenger conveyor that is a continuous walkway driven by mechanical power and is used for conveying passengers on the same or between different traffic levels. Section 3 of the Ordinance stipulates that the Ordinance applies to every escalator in Hong Kong but excluding amusement devices, conveyors, escalators in any ship, ramps in a pier etc.
(2) How is escalator safety regulated?

The regulatory framework for escalator safety under the Ordinance is made up of five major components.

(1) **Type Approval System** —

To ensure that only escalators with proper design, good quality and in compliance with EMSD standards\(^2\) are used in Hong Kong, the Ordinance stipulates that no escalator works shall be carried out unless the escalator to be installed and all its safety components are of a type for which written approval has been obtained from the Director of Electrical and Mechanical Services (the Director).

(2) **Use Permit System** —

The Ordinance stipulates that the responsible person for the escalator shall arrange examination of the escalator by a registered escalator engineer after the completion of its installation, so as to confirm that the escalator is in safe working order. The escalator must not be put into use and operation without a use permit issued by the Director.

The Ordinance also stipulates that the responsible person for the escalator shall arrange examination of the escalator by a registered escalator engineer before the expiry of the half-year validity period of its use permit, so as to confirm that the escalator is in safe working order. The escalator must not continue to be used or operated unless the use permit has been renewed by the Director.

(3) **Resumption Permit System** —

The Ordinance stipulates that the responsible person for the escalator shall arrange examination of the escalator by a registered escalator engineer after the completion of a major alteration of the escalator, so as to confirm that the part affected by the major alteration is in safe working order. The escalator must not continue to be used and operated unless a resumption permit has been obtained from the Director.

(4) **Registration System** —

The Ordinance provides for the registration of qualified persons as registered escalator contractors, registered escalator engineers or registered escalator workers, and relevant registers to be established and maintained for public inspection.

The Ordinance stipulates that the responsible person for the escalator must cause a registered escalator contractor to undertake the maintenance works of the escalator, and also arrange examination by a registered escalator engineer. Moreover, only qualified registered persons may personally undertake escalator works or directly supervise other persons to carry out escalator works.

The Ordinance requires registered escalator contractors to renew their registration every 5 years to ensure that they continue to meet the registration requirements. Registered escalator engineers and registered escalator workers are also required to renew their registration every 5 years to ensure that they meet the continuing practice and continuing learning requirements.

If a registered person commits a professional misconduct, which is a disciplinary offence, the disciplinary board under the Ordinance may order the cancellation or suspension of his registration after a hearing.

(5) **Direct Inspection and Enforcement Action** —

EMSD will conduct random / surprise inspections on a “risk-assessment basis” to check whether the escalator works comply with the statutory requirements. Upon the detection of irregularities or disciplinary offences during the inspections, EMSD will take appropriate enforcement action against the relevant persons.

According to section 2 of the Ordinance, the responsible person for an escalator is defined as:

1. Owner of the escalator; or
2. any other person who has the management or control of the escalator,

but that does not include any person who only uses or operates the escalator or carries out escalator works in relation to the escalator. The owner of the escalator may, according to needs, confer on the appointed responsible person for the escalator all or part of the management or control of the escalator in a specific and clear manner, and provide the responsible person with adequate information so that he/she can effectively perform the duties in relation to the escalator.

Apart from the owner of the escalator, any other person who has the management or control of the escalator (i.e., who is responsible for the management or control of the escalator) including the organisation and its staff, and the property management company under its contract and the staff representing the property management company, shall be regarded as the responsible person for the escalator. The responsible person for an escalator shall perform the relevant duties of a responsible person as stipulated in the Ordinance and in accordance with the functions conferred on him/her by the owner of the escalator. The responsible person for an escalator may, according to needs, appoint his/her employees to perform all or part of the management duties in relation to the escalator, and provide the staff concerned with clear guidelines so that the requirements of the Ordinance can be fulfilled. Please refer to Question 4 for details of the duties of a responsible person for an escalator.

If the escalator forms a common part of the building or structure under the Building Management Ordinance (Cap 344) and if an owners’ corporation exists for the building or structure, the owners’ corporation shall perform the duties of the escalator owner in accordance with the Ordinance. It may appoint a suitable agent (e.g. a property management company or works consultant) to perform the duties of the responsible person as stipulated in the law on its behalf. If a building or structure is without an owners’ corporation, the owner of the escalator shall be determined by the deed of mutual covenant. Regardless of whether an owners’ corporation exists for the building or structure or not, the responsible person for the escalator may appoint a suitable agent to perform on his/her behalf the duties of a responsible person as stipulated in the law. The responsible person should effectively oversee that the appointed agent has properly discharged his/her duties as stipulated in the law. To sum up, the responsible person for an escalator, i.e. the person who owns the escalator or who has the management or control of the escalator, shall perform the relevant duties of a responsible person as stipulated in the Ordinance.

If the escalator is a jointly owned or jointly managed facility (i.e. there is more than one responsible person for the escalator), according to section 5 of the Ordinance, compliance with the requirement by one of the responsible persons is already regarded as compliance with the requirement by every other responsible person for the escalator. According to section 46 of the Ordinance, the responsible person for an escalator must engage a registered escalator contractor to undertake the maintenance works of the escalator and ensure that periodic maintenance works are carried out in respect of an escalator and ensure that periodic maintenance is carried out in respect of the escalator at intervals not exceeding one month. To comply with the above requirement, one of the responsible persons shall engage a registered escalator contractor to carry out periodic maintenance for the escalator. It is not required, however, that every responsible person should engage a contractor to carry out periodic maintenance. This arrangement is also applicable to other requirements that the responsible person for an escalator has to fulfil.

The parties who rent or occupy the premises but are not authorised to manage or control the escalator, such as tenants or premises users, are not required to undertake or fulfil the responsibilities of a responsible person for an escalator. They should nevertheless observe the statutory requirements and use the escalator properly. When use of the escalator is prohibited, anyone who uses the escalator regardless of warning is in breach of the law.
According to the Ordinance and the General Regulation, the responsible person for an escalator must:-

(1) Ensure that the escalator and all its associated equipment or machinery are kept in a proper state of repair and in safe working order. (Section 44 of the Ordinance refers)

Example: To meet the above requirement, the responsible person for an escalator may directly or through an agent (e.g. a property management company or works consultant) engage-

(a) a registered escalator contractor to carry out periodic maintenance works for the escalator in accordance with the statutory requirements so that the escalator and all its associated equipment or machinery are kept in a proper state of repair and in safe working order, and to monitor and ensure that the relevant works have been completed by the contractor in accordance with the Code of Practice for Lift Works and Escalator Works and the maintenance contract. In order to monitor the work of the contractor effectively, the responsible person for the escalator should ensure that details of escalator works undertaken by the registered escalator contractor have been entered into the log-book, and countersign the log-book to confirm that the works have been completed by the contractor.

(b) a registered escalator engineer to carry out periodic examination of the escalator in accordance with the statutory requirements, so as to ensure that the escalator and all its associated equipment or machinery are in safe working order.

If the registered escalator engineer finds after completing the examination that the escalator is not in safe working order, he/she will notify the responsible person for the escalator in writing and explain the reasons for not issuing the certificate within 24 hours after the examination is completed. The registered escalator engineer shall also report to the Director of Electrical and Mechanical Services the result of the examination by using the specified form. Upon knowing that the escalator is damaged or is unable to comply with statutory requirements, the responsible person for the escalator should arrange for a registered escalator contractor to carry out rectification work at once. If the registered escalator contractor is employed and managed by an agent (e.g. a property management company or works consultant) on behalf of the responsible person for the escalator, the responsible person for the escalator should effectively oversee that the agent has properly discharged its duties of managing the registered escalator contractor. For example, the responsible person for the escalator may hold regular work meetings with his/her agent (e.g. a property management company or works consultant) to review the daily operations of the escalator and whether the contractor has properly carried out the escalator maintenance work.

(2) Take all reasonable steps to ensure that the escalator is not used under the following circumstances. (Section 45 of the Ordinance refers)

(a) When works concerning the installation, major alteration, demolition of the escalator or works that are likely to affect the safe operation of the escalator are being carried out;

Example: To meet the above requirement, the responsible person for the escalator may put in place relevant measures and designate staff to control the operation of the escalator (e.g. managing the key for activating/locking the escalator), so as to prevent anyone from starting and using the escalator during the course of the works. Meanwhile, the responsible person for the escalator should effectively keep watch over the staff concerned in carrying out the assigned work.

(b) When the escalator does not have a valid use permit; and

Example: To meet the above requirement, the responsible person for the escalator may apply for and manage the use permit in accordance with the requirements of the Ordinance, and ensure that the escalator will not be used or operated when a valid use permit is not displayed.
(c) When no resumption permit has been issued for the escalator after a major alteration has been carried out.

**Example:** To meet the above requirement, after the escalator has undergone a major alteration, the responsible person for the escalator may personally, or by a designated staff, apply for and manage the resumption permit in accordance with the requirements of the Ordinance, e.g. verifying the information on the resumption permit and properly maintaining the records of the resumption permit for future reference.

It is a defence for the responsible person for the escalator to prove that the escalator is used or operated without his/her consent or connivance, and that he/she has taken all reasonable steps to prevent the use or operation of the escalator.

(3) Ensure that works concerning the installation, major alteration and demolition of the escalator, and works that are likely to affect the safe operation of the escalator are undertaken by registered escalator contractors. (Section 46(1) of the Ordinance refers)

**Example:** To meet the above requirement, the responsible person for the escalator may personally or arrange for a designated staff to ensure that the works involved are undertaken by a registered escalator contractor in accordance with the requirements of the Ordinance, and to confirm that those works have been completed by the contractor in accordance with the Code of Practice for Lift Works and Escalator Works, the maintenance contract, etc. Furthermore, the responsible person for the escalator or his/her agent should oversee that the registered escalator contractor has entered into the log-book details of escalator works that have been carried out and countersign the log-book, and maintain the log-book in accordance with the requirements set out in Question 8 of this Guidebook.

(4) Ensure that the escalator maintenance works are undertaken by a registered escalator contractor, and that periodic maintenance works are carried out for the escalator at intervals not exceeding one month. (Section 46(2) of the Ordinance refers)

**Example:** To meet the above requirement, the responsible person of the escalator may personally or arrange for a designated staff to ensure that the periodic maintenance works for the escalator are undertaken by a registered escalator contractor in accordance with the requirements of the Ordinance, and to confirm that those works have been completed by the contractor in accordance with the Code of Practice for Lift Works and Escalator Works, the maintenance contract and the practice guides, etc.

(5) Engage a registered escalator engineer to conduct the following escalator works in accordance with the Ordinance-

(a) To thoroughly examine all the associated equipment or machinery of the escalator before the escalator is put into use and operation; (Section 51 of the Ordinance refers)

(b) To thoroughly examine the escalator and all its associated equipment or machinery after major alterations and before the escalator resumes normal use and operation, so as to determine whether the affected part is in safe working order; (Section 52 of the Ordinance refers)

(c) To thoroughly examine the escalator and all its associated equipment or machinery (periodic examination) at intervals not exceeding 6 months; (Section 53 of the Ordinance refers)

(d) In order to encourage the responsible person for the escalator to make early arrangements for the periodic examination as stated in (c) above, if the registered escalator engineer completes the

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3 Major alteration refers to any alteration work specified in Section 2 of Schedule 1 of the Lifts and Escalators Ordinance.

4 Periodic maintenance works refer to the inspection, cleaning, oiling and adjusting of the escalator and any of its associated equipment or machinery.
examination for the escalator and all its associated equipment or machinery within the last 2 months of the validity period of its existing use permit, the new use permit will be valid until the 1st anniversary of the date of expiry of the existing permit. This provides greater flexibility for the responsible person for the escalator, the contractor and the engineer in arranging a date for the periodic examination. The responsible person for the escalator must ensure that a new use permit is issued before the existing one expires and have it displayed at all times in a conspicuous position adjacent to a landing of the escalator. The responsible person for the escalator may make arrangements for a registered escalator engineer to complete the periodic examination of the escalator within 2 months before the expiry of the existing use permit. Upon receiving the safety certificate issued by the registered engineer, the responsible person for the escalator should submit the properly completed certificate together with the prescribed fee to the Director of Electrical and Mechanical Services to apply for a new use permit for the escalator. If the periodic examination of the escalator is carried out on a date outside the 2-month period mentioned above, the validity period of the new use permit lasting for 6 months will count from the first day after the completion of the periodic examination. (The responsible person for the escalator may refer to the diagram at Appendix 1 of this Guidebook to find out more about the above arrangement) (Part 5 of Schedule 5 of the Ordinance refers)

(6) Ensure that a valid use permit is displayed at all times in a conspicuous position adjacent to a landing of the escalator. (Section 69 of the Ordinance refers.)

**Example:** To meet the above requirement, the responsible person for the escalator may personally or through an agent (e.g. the property management company, works consultant or contractor) effect the timely replacement of the use permit in accordance with the requirements of the Ordinance. The use permit in force should be displayed in a conspicuous position adjacent to a landing of the escalator for inspection by users.

(7) Notify EMSD in writing by using the specified form (Appendix 2) and the registered escalator contractor currently undertaking the escalator works of any serious escalator incident, including the death or injury of a person, failure of the main drive system, serious incident caused by the failure of any brakes, step chains, drive chains or safety equipment of the escalator, within 24 hours of coming into knowledge of the incident. If no registered escalator contractor is currently engaged, the registered escalator contractor who most recently has undertaken any escalator works in respect of the escalator should be notified. (Section 70 of the Ordinance refers)

**Example:** To meet the above requirements, the responsible person for the escalator may directly or through an agent (e.g. the property management company, works consultant or contractor) should notify EMSD in writing by using the specified form (Appendix 2) in accordance with the requirements of the Ordinance and within the specified period of the incident. The responsible person for the escalator should also keep a copy of the completed specified form properly for inspection. The responsible person may specify in the maintenance contract that the registered escalator contractor shall implement the above requirement of the Ordinance on his/her behalf. The responsible person for the escalator may consider working out with the escalator contractor ways of communicating with each other in the event of an emergency to expedite communication.

(8) Provide without charge any assistance or information that EMSD or other law enforcement officers may reasonably require for carrying out an investigation. (Section 71 of the Ordinance refers)

**Example:** To meet the above requirement, the responsible person for the escalator may put in place relevant guidelines requiring his/her staff to provide assistance.
(9) Keep the record of log-book as specified in the regulations for at least the recent 3 years. (Section 17 of the General Regulation refers)

Example: To meet the above requirement, the responsible person for the escalator may personally or through an agent (e.g. the property management company, works consultant or contractor) maintain log-books of the escalator and ensure that the required information, such as the content and time of the escalator works carried out, the name of the qualified person, accident records, name and registration number of the registered escalator contractor, etc., has all been entered into the log-books for inspection.

(10) If the escalator is involved in such serious incidents as stated in item (7) above and its operation cannot be resumed before the end of the 4-hour period after the contractor becomes aware of the incident, the registered contractor responsible for the escalator must notify users by displaying in a conspicuous part of the escalator a notice in the specified form (Appendix 3) containing information about the type of incident involved, including the reason for the suspension. Any person shall not obstruct the posting of the notice by the registered contractor or remove the notice before the escalator resumes normal operation. (Section 69 of the General Regulation refers)

Failure to comply without reasonable excuse with the above requirements by the responsible person for the escalator may result in the prohibition from use or operation of the escalator, and a possible fine or imprisonment for the responsible person. Please refer to the following table for the penalty:

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<tr>
<th>Item</th>
<th>Ordinance</th>
<th>Penalty</th>
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<tbody>
<tr>
<td>(1)</td>
<td>Section 44</td>
<td>Maximum fine at level 5 ($50,000)</td>
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<td>(2)</td>
<td>Section 45</td>
<td>Maximum fine at level 6 ($100,000) and imprisonment for 12 months</td>
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<tr>
<td>(3)</td>
<td>Section 46(1)</td>
<td>Maximum fine at level 5 ($50,000)</td>
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<tr>
<td>(4)</td>
<td>Section 46(2)</td>
<td>Maximum fine at level 5 ($50,000)</td>
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<td>(5)</td>
<td>Section 51, 52 and 53</td>
<td>Maximum fine at level 3 ($10,000)</td>
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<td>(6)</td>
<td>Section 69</td>
<td>Maximum fine at level 3 ($10,000)</td>
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<td>(7)</td>
<td>Section 70</td>
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<td>Maximum fine at level 3 ($10,000)</td>
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<td>(9)</td>
<td>Section 17</td>
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<tr>
<td>(10)</td>
<td>Section 69</td>
<td>Maximum fine at level 3 ($10,000)</td>
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Details of application fee regarding the various escalator certificates (e.g. use permits and resumption permits) are set out in the Lifts and Escalators (Fees) Regulation ("the Fees Regulation"). The responsible person for the escalator may refer to the Annex of the Fees Regulation for the required fees or visit EMSD website for relevant information.
(5) What are escalator works?

According to the definition in section 2 of the Ordinance, escalator works include any kind of work concerning the installation, commissioning, examination, maintenance, repair, alteration or demolition of an escalator or any associated equipment or machinery of an escalator.

Associated equipment or machinery refers to any component, device, equipment or machinery for or connected with the escalator, including any safety component and safety equipment of the escalator, viz. steps, pallets, driving machine brake, overspeed governor, broken-step-chain device and broken-drive-chain device, etc.

(6) Who may carry out escalator works?

According to section 42 of the Ordinance, no person other than:

1. a registered escalator engineer;
2. a registered escalator engineer, a registered escalator worker or a competent escalator worker employed under a contract of employment by a registered escalator contractor who undertakes the escalator works; or
3. a worker directly supervised, at the site where the escalator works are being carried out, by a qualified person mentioned in item (1) or (2) above, shall carry out escalator works.

If there is a need to verify the recognised qualification of the qualified person mentioned in item (1) or (2) above, the responsible person for the escalator may ask the person concerned to produce a valid registration card for inspection.

5 Including “specified persons” authorised by the Director of Electrical and Mechanical Services to carry out the lift works personally.

6 If the registered escalator engineer is not employed by the registered escalator contractor who undertakes the relevant works, the engineer and the workers under his/her direct supervision can only conduct examinations for the escalator.

7 The registration is made in accordance with the prevailing demarcation of the kinds of work undertaken by trade practitioners. The classification is made up of three classed, viz. Class A, Class B and Class C, of lift workers or escalator workers who have sought registration to become qualified persons qualified to personally carry out the following works respectively: (i) (under Class A), lift works or escalator works in respect of a lift or an escalator before the first use permit for the lift or the escalator is issued, excluding any examination; and demolition works of a lift or an escalator; (ii) (under Class B) after the first use permit for a lift or an escalator is issued, any lift works or escalator works in respect of the lift or the escalator, excluding any examination or demolition works of the lift or the escalator, and (iii) (under Class C) any examination of a lift or an escalator.
The responsible person for an escalator should engage a registered escalator contractor to carry out periodic maintenance for the escalator at intervals not exceeding 1 month, and arrange for a registered escalator engineer to carry out periodic examinations of the escalator at intervals not exceeding 6 months, so as to ensure that the escalator and all its associated equipment or machinery are kept in a proper state of repair and in safe working order.

Meanwhile, EMSD has established a use permit online application system through which registered escalator contractors may apply for use permits for escalators. Registered escalator contractors may submit use permit applications on behalf of the responsible person for the escalator via the internet, and the information/data submitted will be transferred and stored by electronic means. This electronic platform is instrumental in speeding up the application procedure for use permits. For details, please contact the registered escalator contractor.

(1) Periodic maintenance of escalators

Periodic maintenance of escalators, also known as “oiling”, includes such work as inspection, cleaning, oiling and adjustment.

(2) Periodic examination of escalators

Thorough examination of the escalator and all its associated equipment or machinery at intervals not exceeding 6 months;

The responsible person for the escalator will generally engage a registered contractor on contract terms to provide the above periodic maintenance and examination services to ensure the safe operation of the escalator. All registered escalator contractors offer round-the-clock services for fault call handling and carry out emergency repair work for the escalators for which they are responsible, like making emergency repairs on faulty escalators, etc. Moreover, upon receiving an incident notification from the responsible person for the escalator, a registered escalator contractor has to carry out an investigation and submit a detailed report to EMSD within 7 days.

(1) Requirement on keeping of log-books

According to section 17 of the General Regulation, the responsible person for an escalator should maintain a log-book for the escalator for at least the recent 3 years, detailing the escalator works undertaken, incidents/failures attended to and inspections conducted by the registered escalator contractor, registered escalator engineer and registered escalator worker.

(2) Information to be entered into the log-book

A log-book of the approved format is available from the escalator contractor. The log-book should contain basic information about the escalator and the contractor, including the location of the escalator and date of installation, escalator number and its specifications, name of the installing contractor, name of the present maintenance contractor, the commencement date of maintenance and the routine maintenance time table. If the contractor (main contractor) has subcontracted some of the maintenance items to other registered escalator contractors (subcontractors), it should clearly list out on the log-book the names of all the subcontractors.

(3) The following information about the escalator works should also be entered into the log-book:

(a) Name and registration number of the qualified person who undertook the works;

(b) Date and time of commencement and completion of the works;

(c) Type of works (e.g. installation, repair, inspection and routine maintenance);
(d) Records of fault-call attendance, including the cause, date and time of the failure, and the date and time of resumption of operation;

(e) Date, time and details of accidents that have taken place;

(f) Name of the authorised person of the subcontractor;

(g) Date and time when the escalator resumes operation;

(h) Name, signature and contact details of the responsible person for the escalator or his/her agent (e.g. representative of the property management company); and

(i) Duration of escalator maintenance work (oiling) anticipated by the contractor.

Major alterations in relation to an escalator are clearly specified in Section 2 of Schedule 1 of the Ordinance as follows:

1. Addition of any safety component or safety equipment for the escalator;
2. Change in the type of control or operation of the escalator;
3. Modification resulting in an increase in the speed of the escalator;
4. Replacement, including any change in type, of any safety component or safety equipment for the escalator;
5. Replacement, including any change in type, of the drive of the escalator;
6. Replacement, including any change in type, of the braking system of the escalator;
7. Replacement, including any change in type, of the non-reversal device of the escalator; or
8. Replacement, including any change in type, of the overspeed protection device of the escalator.

The responsible person for the escalator must employ a registered escalator contractor to carry out the major alterations, and arrange examination of the escalator by a registered escalator engineer before the resumption of the normal use and operation of the escalator. The responsible person for the escalator may inquire with the registered escalator contractor under his/her employ as to whether the works being carried out involve any major alteration.
If the major alterations mentioned above will be completed on a date close to the expiry date of the use permit of the escalator (e.g. within two months before the expiry of the use permit), the responsible person for the escalator may consult with the contractor and arrange a thorough examination by a registered escalator engineer of the escalator and all its associated equipment or machinery in advance, so that application for use permit and resumption permit for the escalator can be made simultaneously. The new use permit, will be valid until 6 months after the expiry of the existing permit.

(10) Who may carry out periodic maintenance for escalators?

Only registered escalator contractors can carry out periodic maintenance for escalators. The responsible person for the escalator may engage any registered escalator contractor to carry out the maintenance works. The law does not require that maintenance works must be carried out by the contractor who installs the escalator.

A list of registered escalator contractors and their contact information are available on the EMSD website:

Any equipment, including its components or parts, used for replacing the old one during the major alteration works should be in full compliance with the requirements of the current legislation. If a safety equipment of the escalator is to be replaced, prior approval from EMSD must first be obtained by the escalator contractor for the replacement equipment before its installation and use in Hong Kong.

Furthermore, although the equipment of the existing escalators is in compliance with the design and safety standards adopted at the time of installation, it is recommended by EMSD that the responsible person for the escalator should, in consultation with the registered escalator contractor, consider installing equipment or devices (such as handrail speed monitoring device, missing step device, etc.) that will enhance the safety of the escalator when arranging major alteration work or replacement of major parts for the escalator. The above escalator works must be undertaken by a registered escalator contractor.

(11) For major alterations and replacement of major parts of escalators, what are the requirements and advice with regard to the added equipment?

Here are some safety tips on the safe use of escalators:

(1) Do not overload the escalator;
(2) Do not interfere with the escalator equipment;
(3) Hold the handrail and do not walk on the escalator to avoid accidents;
(4) Do not play or run on the escalator;
(5) Do not lean over the handrail;
(6) Keep your feet away from the skirting or yellow stripes;
(7) Keep trolleys, baby strollers or wheelchairs off the escalator;
(8) Do not play with the emergency stop button which is to be used only when under emergency situation; and
(9) Children must be accompanied by adults when using the escalator.

(12) How to use the escalator safely?
To minimise the risk of serious incidents caused by human negligence or equipment failure, escalators currently in use in Hong Kong are all fitted with appropriate safety devices in accordance with the requirements of the Ordinance. The basic structure of a typical escalator is shown in the diagram below:

(13) What is the structure of an escalator?

(14) What should be noted in the daily management of escalators?

The responsible person for the escalator should take note of the following in the daily management of the escalator:

(1) Suitable building management staff should be employed to manage the daily operation, repair and examination of the escalator;

(2) When regular maintenance, inspections or other escalator works are carried out, the building management office should notify users of the suspension arrangement of escalator services in advance for smooth conduction of works;

(3) The escalator should be kept clean and hygienic. Use dry cleaning utensils and non-erosive detergents for daily cleaning purposes;

(4) Remind passengers to use the escalator properly to avoid passenger injury, escalator failure, damage or wear and tear caused by improper use;

(5) Damage to the building, such as water leakage or concrete spalling affecting the operation of the escalator, should be repaired immediately. If necessary, the service of the escalator should be temporarily suspended and shielded with protective cover;

(6) Maintain an operation and maintenance manual (O&M manual) for the escalator for reference when needed;
(7) Display the name and emergency contact telephone number of the registered escalator contractor in a conspicuous position adjacent to the landing of the escalator. If the contractor (the principal contractor) subcontracts the day to day maintenance items or emergency repair service to another registered escalator contractor (the subcontractor), the name and emergency contact telephone number of the subcontractor should also be displayed simultaneously in a conspicuous position adjacent to the landing of the escalator; and

(8) To identify through periodic maintenance areas of improvement for the escalator. Consider carrying out relevant improvement works to enhance the safety, reliability and comfort of the existing escalator.

(15) **What are the duties of a responsible person for the escalator in relation to the daily operation of the escalator?**

Upon observing any abnormality of the escalator, the responsible person for the escalator or his/her agent (such as the management staff of the building/shopping centre) should promptly and without delay notify the registered escalator contractor to effect repair and improvement work to ensure the safety of passengers.

The responsible person for the escalator or his/her agent (such as the management staff of the building/shopping centre) should inspect the escalator frequently, and pay attention to the following during the inspection or in case of a complaint:

(1) Are there any abnormal noises when the escalator operates?

(2) Are the steps, combplates and handrails of the escalator damaged?

(3) Does the escalator start, stop and operate in a normal manner?

(4) Is the emergency stopping device for use by passengers functioning effectively?

(5) If any passenger is found using the escalator improperly, stop him/her immediately.
How should the responsible person for the escalator collaborate with the registered escalator contractor to ensure the proper operation of the escalator?

The responsible person for the escalator or his/her agent (e.g., the management staff of the building/shopping centre) should work collaboratively with the registered escalator contractor to ensure that the escalator is in compliance with the requirements of the Ordinance. The responsible person or his/her agent should:

1. Notify the registered escalator contractor immediately for inspection and repair, upon learning of any abnormal operation or damage to the escalator;

2. Monitor the registered escalator contractor to see if effective precautionary measures have been taken when carrying out the escalator works, so as to prevent other people from entering the work area and thus causing danger;

3. Ensure that the escalator works concerning installation, major alteration or demolition of the escalator, or that are likely to affect the safe operation of the escalator are carried out by registered escalator contractors;

4. Supervise the registered escalator contractor, registered escalator engineer or registered escalator worker to ensure that details of escalator works have been entered into the log-book, and countersign the log-book to confirm that the works have been completed;

5. Ensure that periodic maintenance works of the escalator and all its associated equipment or machinery, including inspection, cleaning, oiling and adjustment are carried out by a registered escalator contractor at least once a month;

6. Arrange thorough examination of the escalator and all its associated equipment or machinery is carried out by a registered escalator engineer at intervals not exceeding six months, and apply for a valid use permit for the escalator;

7. Update the logbook and maintain the relevant records for at least the recent 3 years for inspection by EMSD;

8. Provide a good working environment and relevant equipment for the registered escalator contractor to carry out maintenance work properly in order to ensure the safe operation of the escalator;

9. Coordinate with the registered contractor and registered engineer with regard to the arranged schedule for periodic examinations;

10. Notify EMSD in writing by using the specified form (Appendix 2) and the registered contractor responsible for the escalator of any escalator incident within 24 hours of coming into knowledge of the incident. The responsible person may specify in the maintenance contract to assign the registered escalator contractor to fulfil the above notification requirement according to the Ordinance. The responsible person for the escalator may consider working out with the registered escalator contractor ways of communicating with each other in the event of an emergency to expedite communication; and

11. Keep the escalator clean and hygienic.
In case of failure of escalator machinery or passenger injury, the responsible person for the escalator should promptly and without delay notify the fault call centre of the registered escalator contractor for the contractor to send staff to examine the escalator immediately. They should never try to restart the escalator which has stopped operation due to failure, lest more serious accidents may occur.

When notifying the fault call centre of the registered escalator contractor that there is a failure of escalator machinery or passenger injury, the management staff of the building/shopping centre should provide in detail the following information:

1. Name and address of the building / shopping centre;
2. Escalator number of the escalator concerned;
3. Condition of the escalator (e.g., whether the steps, combplates or handrails are damaged, etc.);
4. Name and telephone number of the contact person; and
5. Condition of the injured passenger.

The responsible person for the escalator and the injured passengers should cooperate with the technicians of the contractor so as to facilitate a prompt and safe rescue. In case of more serious circumstances (e.g. passengers feeling ill or having sustained an injury, or a fire has broken out), the responsible person for the escalator should dial 999 to seek help from the Fire Services Department.

There are generally two main types of maintenance services for escalators at present:

1. Standard maintenance
   The registered escalator contractor provides the responsible person for the escalator with the most basic periodic maintenance services as required by the Ordinance, or more comprehensive services in addition to the basic requirements. The contractor is totally or partially responsible, as determined by the terms and conditions, for replacing the damaged parts.

2. Comprehensive maintenance
   This is a more comprehensive form of maintenance. The registered escalator contractor will replace or repair any parts that require replacement due to wear and tear and failure, hence saving the time for quotations or bargaining. (The terms of the maintenance contract, agreed upon by the registered escalator contractor and the responsible person for the escalator, usually do not cover escalator components that passengers have access to, e.g. steps and combs, and equipment not installed by the registered escalator contractor, e.g. the main switch in the machine room.)

The responsible person for the escalator may consider requesting the registered escalator contractor to provide in the tender document separate price lists for expensive spare parts and replacement fittings (such as steps, step chains) as

(i) replacement or maintenance items covered by the maintenance contract; or
(ii) replacement or maintenance items not covered and are subject to additional charges.

Sample tender document – a sample tender document and specifications for escalator maintenance service, and guidelines on how to prepare maintenance service contract can be download from the following EMSD website for reference.
(19) How to select a suitable registered escalator contractor for the maintenance services?

It would be appropriate for the responsible person for an escalator to select through tender a suitable registered escalator contractor for the escalator maintenance services. Alternatively, the responsible person for the escalator may ask for quotations from different registered escalator contractors for comparison. The following should be noted in selecting a contractor:

(1) **Background of the registered escalator contractor**

In determining whether a registered escalator contractor has the capability to provide reliable services, the responsible person for the escalator should consider the business scale of the registered escalator contractor (e.g. number of employees, number of registered escalator engineers and registered escalator workers and competent escalator workers, number of escalators presently maintained by the contractor, its registered capital and financial status), its credibility and reputation in the trade, its performance and experience, whether it has in place a quality management system (e.g. ISO9001 certification), and its administrative arrangement in respect of safety (e.g. whether registered safety officers have been employed).

(2) **Sufficient technical knowhow**

In view of the constant changes in escalator technology, not all registered escalator contractors may have sufficient technical knowhow to provide proper maintenance services for escalators of various brands and models. The responsible person for the escalator should thus need to know how many employees of the registered escalator contractor have received maintenance training or already have the maintenance and repair experience relevant to the particular brand and model of escalator, and whether the escalator contractor provides continuous and appropriate training to its employees, so as to determine if the escalator contractor has sufficient technical knowhow and capability to provide the maintenance services required. Moreover, the responsible person for the escalator should also need to know whether the escalator contractor has sufficient technical information (including wiring diagrams, operation and maintenance manual) on the particular brand and model of escalator, and whether the escalator manufacturer will provide the contractor with technical support.

(3) **Spare parts**

It is inevitable that faulty machinery parts have to be replaced in the course of maintenance. Thus, it is necessary to ascertain whether the contractor has sufficient spare parts for use. The responsible person for the escalator should enquire whether the escalator contractor has the spare parts of the particular brand and model of escalator, and whether the number of such spare parts is sufficient for use by the escalators maintained by the contractor. The responsible person for the escalator may ask to visit the escalator contractor to confirm the number of these spare parts. He/she should also ask the escalator contractor whether there are ways to obtain or purchase the spare parts of the escalator, whether there are any previous records or supporting documents, whether parts are obtainable from the escalator manufacturer and whether there is proof from the escalator manufacturer, and how much time is required for delivery of the parts. In case substitutes have to be used, whether the escalator contractor can ensure their quality and compatibility with other machinery parts.
(4) Anticipated duration of maintenance works

Whether the periodic maintenance is to be conducted on a weekly, bi-weekly or monthly basis? The registered escalator contractor is required to advise the responsible person for the escalator the time needed for performing periodic maintenance for each escalator installation. Furthermore, the registered escalator contractor should also affix a maintenance schedule, or “oiling schedule”, on the log-book for inspection.

(5) Performance rating system

In choosing a suitable registered escalator contractor for maintaining and repairing the escalators of the building, the responsible person for the escalator or his/her property management company may refer to the Registered Escalator Contractors’ Performance Rating Scheme established by EMSD and check the points and ratings of all the registered escalator contractors. Such information is available for download at the EMSD website.

(6) Capability of dealing with emergencies

Breakdown of an escalator or power failure of the building may lead to temporary suspension of escalator service. The responsible person for the escalator may set a time limit within which the registered escalator contractor must send staff to carry out inspection and repair. The responsible person for the escalator should also consider the geographical distribution of the escalator contractor’s service centres, such as the distance from the nearest service centre to the building, and the number of emergency support staff during and outside office hours. In addition, the responsible person for the escalator should know about the arrangements of the escalator contractor in dealing with emergencies in case of a typhoon. The responsible person for the escalator should have a clear understanding of these issues.

The following should be noted when signing a maintenance contract:

(1) Duration of the contract, i.e. whether it is a one-year, two-year or five-year contract, or a contract without time limit.

(2) The notification period for termination of contract, e.g. 90 days in advance.

(3) Are the maintenance fees paid monthly or quarterly? Is advance payment required?

(4) Are the maintenance fees reasonable? The responsible person for the escalator should consider whether the maintenance fees are commensurate with the services covered in the maintenance contract. If in doubt, the responsible person for the escalator may ask the registered escalator contractor to provide for reference relevant information regarding the calculation of the maintenance fees, e.g. the charges for each service item covered by the maintenance contract.

(5) Are the maintenance fees adjusted annually? How is the rate of adjustment determined?

(6) What action will the registered escalator contractor take for default on maintenance payment? How long does it take for a default on maintenance payment to trigger a suspension of services? Is interest charged on the outstanding fees?

(7) Is the maintenance work (oiling) carried out weekly, bi-weekly or monthly? The Ordinance requires that the responsible person for the escalator should arrange for the periodic maintenance of the escalator by the registered escalator contractor at intervals not exceeding one month.

(8) Whether the registered escalator contractor has provided a schedule of maintenance to specify the work to be carried out during periodic maintenance.
(9) The spare parts to be covered, scope of service, limitations (e.g. the contractor is not responsible for any damage caused to the spare parts due to users’ negligence), and the costs for replacement or repair of equipment (e.g. whether additional charges will be imposed for replacement of escalator steps).

(10) The Ordinance requires that an escalator should be thoroughly examined by a registered escalator engineer at intervals not exceeding six months. Does the contract state that the contractor will provide such a service? Is additional payment required? To avoid committing an offence under the Ordinance, the responsible person for the escalator may make an agreement with the registered escalator contractor as part of the maintenance contract that the registered escalator contractor will be responsible for applying for the escalator use permit, paying the relevant fees and posting the valid use permit, etc.

(11) Does the contract include a pledge by the contractor that in the event of an incident or an escalator failure, the contractor will send staff to help within a specified time limit? What is the consequence if the contractor fails to achieve the target response time?

(12) Is the escalator contractor responsible for cleaning the escalator steps and the escalator pit, as well as attending to the flooding problem in the escalator pit?

(13) What is the arrangement for other works that involve building installations and the escalator, such as ceiling or floor repair works of the lobby?

(14) Who is responsible for the maintenance of the decorations of the escalator? What are the relevant arrangements?

(15) Has the escalator contractor taken out sufficient and comprehensive insurance against any casualties or property losses arising from accidents or incidents relating to the maintenance of the escalator?

(16) Consideration may be given to stipulating in the contract that a certain amount of the maintenance fees will be retained as deposit, and that deposit will be returned in full to the escalator contractor upon contract expiry, subject to all contract requirements being met by the contractor.

(17) Penalty clauses may be added to the maintenance contract as appropriate. For example, penalty will be imposed where the incidence of escalator failure/service disruption time for each escalator exceeds the permitted levels in a month.

(18) If the registered escalator contractor (main contractor) wants to subcontract some of the maintenance items to other registered escalator contractors (subcontractors), it must obtain the prior approval of the responsible person for the escalator and inform EMSD by using a specified form before the subcontracting arrangements become effective.
(21) What should the responsible person for an escalator be mindful of when changing registered escalator contractor?

The Ordinance does not require that the responsible person for an escalator must engage the registered escalator contractor who installs the escalator to carry out maintenance work for the escalator. They may engage any suitable registered escalator contractor to maintain the escalator. When selecting a contractor, however, the responsible person for the escalator may refer to the suggestions in Question 20 of this Guidebook. Without violating the terms of the escalator maintenance contract with the registered escalator contractor, the responsible person for the escalator may switch to another registered escalator contractor for the maintenance of the escalator.

In accordance with section 44 of the Building Management Ordinance (Cap. 344), when procuring supplies, materials or services, etc., the owners’ corporation must observe the standards and guidelines prescribed in the Code of Practice published for the purpose of procurement. Relevant details can be found in Appendix (2) of the Code of Practice on Building Management and Maintenance prepared by the Home Affairs Bureau and the Home Affairs Department, or on the webpage on building management of the Home Affairs Department at: http://www.buildingmgt.gov.hk/

Apart from comparing maintenance fees, the responsible person for an escalator should take note of the following when changing registered escalator contractor:

(1) Does the registered escalator contractor intending to take over the maintenance work have adequate skills, manpower and technical knowhow (see Question 20) to maintain the escalator, especially escalators of a new model? As the operation of such escalators is controlled by microprocessors and computer programmes, a higher level of expertise is required to maintain their proper and safe operation. If the registered escalator contractor taking over the maintenance is unable to obtain parts from the original manufacturers, EMSD considers that the use of parts from non-original manufacturers is acceptable subject to the condition that both the function and compatibility of the non-original parts are on par with the parts from original manufacturers. For safety components of escalators, approval must first be sought from EMSD before their installation and use. The responsible person for the escalator may require the contractor to ensure that the function and compatibility of the non-original parts are on par with the parts from original manufacturers.

(2) What are the differences between the services provided by the registered escalator contractor intending to take over the maintenance work and those provided by the existing registered escalator contractor? Whether the maintenance fees, coverage and service standards are reasonable.

(3) What is the difference between the terms of the maintenance contracts? Does the responsible person for the escalator have to take a greater responsibility and a higher risk?

(4) When there is a change of registered escalator contractor, the new registered escalator contractor taking over the maintenance should within 14 days after the maintenance contract becomes effective submit an examination report of the escalator to EMSD. EMSD will assign inspectors to carry out random inspection to ensure that the quality of services is maintained. During the course of transfer, the existing registered escalator contractor is required to provide the necessary technical information of the escalator’s equipment and components (such as the operation and
maintenance guidelines/instructions) to the incoming registered escalator contractor. To minimise disputes, the responsible person for the escalator should discuss with both parties, in order to lay down a clear demarcation of responsibility in handling the outstanding maintenance work left by the existing registered escalator contractor.

(5) According to EMSD guidelines, a registered escalator contractor taking over the maintenance work of an escalator should conduct a thorough examination of the escalator to ensure its proper operation. Any irregularities detected should be rectified immediately to ensure safety. The responsible person for the escalator has the responsibility to cooperate with the contractor so that the rectification work can be completed as early as possible. If for any reasons the registered escalator contractor is unable to rectify the irregularities, thus affecting the safe operation of the escalator, it must report to EMSD immediately. The contractor should also cease the operation of the escalator and inform the responsible person immediately, and to post warning notice in a conspicuous position adjacent to a landing of the escalator.

(6) The registered escalator contractor whose maintenance contract is terminated is not allowed to hinder access to the control system of the escalator by removing or adding any devices or circuits, setting password, modifying the programme, etc., which will affect the normal operation of the escalator. The responsible person for the escalator should report any such malpractice to EMSD.

In accordance with section 70 of the Ordinance, the responsible person for the escalator has the responsibility to notify EMSD in writing by using the specified form (Appendix 2) and the registered escalator contractor who currently undertakes any escalator works in respect of the escalator within 24 hours upon coming into knowledge of any of the following incidents:

(1) the death of, or injury to, any person involving any part of the escalator;
(2) failure of the main drive system; or
(3) failure of a brake, step chain, drive chain or safety equipment.

The registered escalator contractor is able to offer assistance in this respect. Under mutual agreement, the contractor may report such incidents to EMSD on behalf of the responsible person for the escalator so as to satisfy the requirement of Section 70 of the Ordinance.

Moreover, if the responsible person for the escalator (e.g. the escalator owner, the property management company or works consultant) is of the view that the registered escalator contractor responsible for maintenance work is not discharging its duties properly (e.g. failing to carry out proper periodic maintenance and periodic examination of the escalator and its associated equipment or machinery), thus affecting the safe operation of the escalator, he/she should cease the operation of the escalator and contact EMSD as soon as possible.
In case of an escalator failure or if there is any dissatisfaction with the operation of the escalator (which is not related to safety), a good and quick way to deal with the problem is to notify the registered escalator contractor to send staff to undertake repair or follow-up actions.

If the responsible person for the escalator is doubtful of the suggestion or judgement of the registered escalator contractor employed (e.g. when the contractor considers that the escalator is not in safe working order and must cease operation), they may commission an independent consultancy company or another registered escalator contractor to provide independent professional advice so as to come to an appropriate decision.

You may contact EMSD by phone (1823 call centre or 2333 3762) or by e-mail (info@emsd.gov.hk).

More relevant information is available on the EMSD home page at www.emsd.gov.hk.
Appendix 1

Flexible arrangement for periodic examination of escalators (Example)
Appendix 2

Form LE27
Notification of incident involving a lift or an escalator

Name: _______________________
Telephone: ___________________
Date: ________________________

Note: Pursuant to section 40 and section 74 of the Lifts and Escalators Ordinance, Cap. 618, the responsible person for a lift or an escalator must within 24 hours after an incident comes to his or her knowledge, notify in writing by completing the following to -

1. The Director of Electrical and Mechanical Services
(by fax: 2504 5970 or by e-mail: lees@emd.gov.hk)

2. Registered Lift / Escalator Contractor (responsible for maintaining the lift / escalator)
Name: _______________________
Fax No.: ____________________

Brief Description of Incident (tick ‘✓’ where appropriate)

Date of Incident: ____________
Location of Incident: ___________
Lift / Escalator No.: ___________
Lift / Escalator Location ID: ___________

- Lift
  - Failure of main drive system (failure of main power system excluded)
  - Breakage of suspension rope
  - Failure of brake, overload device, or safety equipment
  - Failure of interlocking device for any door of the lift-way (failure of the making of electrical contact of safety contacts excluded)
  - Failure of interlocking device for any door of the carrier (failure of the making of electrical contact of safety contacts excluded)

- Escalator
  - Failure of main drive system (failure of main power system excluded)
  - Failure of brake, step chain, drive chain, or safety equipment

- Lift
  - Others, please specify:

- Escalator

Details of Casualty

No. of Person(s) involved in the incident: ___________
No. of Deaths: ___________
No. of Person(s) requiring Hospitalization: ___________
No. of Injuries: ___________

Responsible Person for the Lift / Escalator or his Agent

Guidebook for Responsible Persons for Escalators 51
Appendix 3

Form LE30
Notice of suspension of service following lift / escalator incidents
# Contact List

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