



一般法例  機電工程署

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**General Legislation**

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## How To Apply - Registered Engineer 註冊工程師申請辦法



註冊工程師  
Registered Engineer

*Lifts and Escalators Ordinance  
(Chapter 618)*

升降機及自動梯條例 (第618章)

機電工程署  
**EMSD**



# 申請辦法

## How To Apply

註冊工程師  
Registered Engineer

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## 1. 申請註冊為升降機工程師及 / 或自動梯工程師所須符合的規定

《升降機及自動梯條例》第 78 條、第 79 條及附表 9 第 2 部和第 4 部詳列申請註冊為升降機工程師 / 自動梯工程師所須具備的資格和經驗。申請人提出升降機工程師 / 自動梯工程師註冊申請前，必須已經具備合適資格、培訓和經驗。

任何人若具備以下任何一個途徑（即途徑 1 至途徑 3）所訂明的資格及經驗，即符合資格申請成為註冊升降機工程師 / 註冊自動梯工程師：

途徑 1	申請人是機械工程、輪機及造船工程、電機工程、電子工程、屋宇裝備工程、或控制、自動化及儀器儀表工程的註冊專業工程師；及
	已累積不少於 2 年的升降機工程或自動梯工程相關工作經驗（請一併參閱 * 註解）。
途徑 2	申請人持有機械工程、輪機及造船工程、電機工程、電子工程、或屋宇裝備工程的學士學位，或持有獲註冊主任認可的等同或更高資格；及
	已累積不少於 4 年的升降機工程或自動梯工程相關工作經驗（請一併參閱 * 註解）。
途徑 3	申請人持有從職業訓練局或技術學院發出的機械工程、電機工程、電子工程、屋宇裝備工程、或輪機工程的高級文憑或高級證書，或持有獲註冊主任認可的等同或更高資格；及
	(i) 已完成不少於 2 年的機械工程、電機工程、電子工程、屋宇裝備工程或輪機工程的學徒訓練，並在完成學徒訓練後取得合共不少於 3 年的升降機工程或自動梯工程相關工作經驗；或 (ii) 已累積不少於 5 年的升降機工程或自動梯工程相關工作經驗（請一併參閱 * 註解）。

途徑3已於  
2018年5月  
1日終止

## 備註

\* 申請成為註冊升降機工程師必須具備所需的升降機工程實際經驗；而申請成為註冊自動梯工程師也須具備所需的自動梯工程實際經驗。如申請人在同一時期從事升降機工程及自動梯工程兩類工作，則兩類工作的累積時間可重疊計算。

### (a) 註冊續期所須符合的規定

所有註冊升降機工程師或註冊自動梯工程師申請註冊續期時，均須符合以下規定：

- (i) 在提交續期申請日期之前的 5 年期間內，已累積不少於 12 個月的升降機工程或自動梯工程相關工作經驗；以及
- (ii) 在提交續期申請日期之前的 5 年期間內，已完成不少於 90 小時的持續專業進修課程以掌握最新的技術發展。

### (b) 相關工作經驗

申請成為註冊升降機工程師及／或註冊自動梯工程師所需具備的相關工作經驗，可參考附件 1 的指引。

## 2. 過渡安排

為《升降機及自動梯條例》申請成為註冊升降機工程師／註冊自動梯工程師，設定兩項過渡安排。

在《升降機及自動梯條例》生效時，根據《升降機及自動梯（安全）條例》（第 327 章）註冊的升降機工程師或自動梯工程師，即視作已根據《升降機及自動梯條例》註冊。該等工程師可繼續每隔不超過 5 年為其註冊續期，惟須符合上文第 1（a）項的規定。這是一項不溯既往的安排。然而，若他們離開該註冊制度，便須符合《升降機及自動梯條例》載列的所有註冊規定，即必須取得指定的學術及專業資格。

途徑 2 和途徑 3 均屬過渡安排，途徑 3 已於 2018 年 5 月 1 日終止，而途徑 2 的確實終止時間，將會在 2023 年再作檢討。

## 3. 申請程序

申請註冊及申請註冊續期的程序如下：-

(a) 申請註冊為升降機工程師及 / 或自動梯工程師及辦理註冊續期的申請表格（表格 LE36），可於下列地點或透過下列途徑索取：

- 香港九龍啟成街 3 號地下機電工程署總部地下客戶服務部；
- 電話熱線：1823（傳真本）；
- 政府表格網址：<http://www.info.gov.hk/forms>；或
- 機電工程署網址：[www.emsd.gov.hk](http://www.emsd.gov.hk)（選擇「公用表格」）

(b) 按照指示填寫申請表格。

(c) 請把已填妥的申請表格連同證明文件及下表所列的訂明申請費用，親自交回或郵寄至機電工程署客戶服務部。（註：無論申請成功與否，已繳申請費用概不發還。）

申請類別	申請費用
註冊成為升降機工程師或自動梯工程師	港幣 \$4,620
升降機工程師或自動梯工程師註冊續期	港幣 \$ 515
註冊成為升降機工程師及自動梯工程師	港幣 \$4,870
升降機工程師及自動梯工程師註冊續期	港幣 \$ 535

(i) 申請人可親自前往香港九龍啟成街 3 號機電工程署總部地下的客戶服務部遞交申請表格及繳付申請費用，客戶服務部的辦公時間為：

星期一至五： 9 時正至下午 5 時 15 分  
星期六、日及公眾假期： 休息

(ii) 申請人亦可把申請表格連同有關文件副本及以支票開出的申請費用郵寄至香港九龍啟成街 3 號機電工程署總部地下客戶服務部。

如選擇以支票付款，抬頭人請註明「香港特別行政區政府」並予劃線。切勿以某位職員為支票抬頭人。期票恕不接受。

申請註冊續期一般須於註冊屆滿日期最少 1 個月前提交，但不得早於 4 個月前。請注意《升降機及自動梯條例》第 79 (2) 條的規定，即必須在註冊主任指明的限期內提出續期申請，升降機工程師及／或自動梯工程師的註冊有效期通常為 5 年。

#### 4. 申請詳情

申請人須把已填妥的表格 LE36，連同一張符合護照相片規格 (35 毫米 x 50 毫米) 的彩色近照、訂明申請費用，以及下述證明文件的副本，一併提交機電工程署辦理。

##### (a) 新申請

- (i) 香港身份證／護照（如申請人親臨機電工程署客戶服務部遞交申請表格，並向客戶服務部人員出示其身份證／護照正本，則無需提交身份證／護照副本）；
- (ii) 專業資格證書或證明文件；
- (iii) 畢業證書或學歷證明文件；
- (iv) 學徒訓練證書或證明文件（只適用於有意按途徑 3 的資歷要求申請註冊的申請人）；
- (v) 申請成為註冊升降機工程師及／或註冊自動梯工程師的筆試證明文件；及
- (vi) 工作經驗證明文件。

## (b) 申請註冊續期

- (i) 持續專業進修課程證書或證明文件；及
- (ii) 相關工作經驗證明文件。

## 5. 審核申請

### (a) 新申請

- (i) 就申請進行審核，以確定申請人是否符合上文第 1 項訂明的基本資格／經驗要求。如有必要，註冊主任可要求申請人提供進一步的證明文件／資料。
- (ii) 申請人已在升降機工程師／自動梯工程師註冊申請的專設筆試中取得及格成績，並在筆試有效期內提交註冊申請。筆試和面試的範圍提綱載於**附件 2**。（持有指定註冊專業工程師資格的申請人無須參加或通過筆試）。
- (iii) 如申請人的學歷／經驗符合註冊要求，便會發信邀請申請人前來面試，以評核申請人對**附件 2** 各項課題的通曉程度。面試進行後，便會就申請人是否適合成為註冊升降機工程師及 / 或註冊自動梯工程師作出建議。如申請人通過面試，其資料將被納入註冊升降機工程師名冊及／或註冊自動梯工程師名冊內。

- (iv) 申請人如成功取得註冊，其下述資料將會展示於註冊升降機工程師及／或註冊自動梯工程師名冊上：

- 註冊人士的姓名；
- 註冊編號；
- 註冊日期；及
- 註冊的屆滿日期。

- (v) 向申請人發出夾附註冊證書和註冊證（視何者適用而定）的已簽署信件作書面回覆。

### (b) 申請註冊續期

- (i) 審核註冊續期申請，以確定申請人 (a) 是否已在提交註冊續期申請日期之前的 5 年期間內，累積不少於 12 個月的升降機工程或自動梯工程或該兩類工程的工作經驗；以及 (b) 是否已按照**附件 3**「升降機工程師或自動梯工程師註冊續期的持續專業發展培訓要求」，累積不少於 90 小時的持續專業進修課程培訓。如有必要，註冊主任可要求申請人提交進一步的證明文件／資料。
- (ii) 如申請人的資格／經驗符合註冊續期的要求，其註冊升降機工程師及／或註冊自動梯工程師的資格將獲續期 5 年。
- (iii) 向申請人發出夾附註冊證書和註冊證（視何者適用而定）的已簽署信件作書面回覆。

## 6. 查詢

香港九龍啟成街 3 號機電工程署總部地下客戶服務部（辦公時間：星期一至五上午 9 時至下午 5 時 15 分；星期六、日及公眾假期休息）

電話：1823（熱線）

傳真：2895 4929

電郵：info@emsd.gov.hk

備註：本文件並非法律文件，只供一般參考之用

《升降機及自動梯條例》第 78 條、第 79 條及附表 9 第 2 部和第 4 部規定，申請註冊為升降機工程師及 / 或自動梯工程師的人士，必須具備 2 至 5 年（視乎資格途徑而定）相關工作經驗及所需實際經驗。註冊為升降機工程師或自動梯工程師必須具備的相關及實際工作經驗，是指獨立進行或在監督下進行升降機工程或自動梯工程的經驗。申請人所須取得的相關工作經驗，應涵蓋升降機及 / 或自動梯安裝，調試，檢查，保養，維修，改建或拆除等各種工程。下文就相關及實際工作經驗作進一步闡釋：

1. 升降機安裝工作：申請人應對馬達、牽引機，主控制板，安全裝置，鎖定裝置，懸掛及其接件，制動系統，限速器，機廂 / 對重安全鉗，緩衝器，夾緊裝置，棘爪裝置，電力線路 / 控制裝置等的安裝工作，具備監管經驗及 / 或知識。
2. 電動升降機維修工作：申請人應對下列項目的維修保養工作具備監管經驗及 / 或知識—
  - (a) 升降機曳引機及制動器；
  - (b) 安全部件（即限速器、安全鉗、緩衝器、門鎖、上行超速保護裝置及機廂不正常移動保護裝置等）；
  - (c) 控制板及電力裝置 / 安全開關；
  - (d) 對重裝置及固定件、導軌及導靴；
  - (e) 升降機井道裝置；及
  - (f) 機廂裝置。

3. 液壓升降機維修保養工作：申請人應對下列項目的維修保養工作具備監管經驗及／或知識－
  - (a) 平層開關；
  - (b) 喉管、接頭、螺栓及夾件、斷流閥、儲油器、泵及電動機；
  - (c) 控制閥、導閥及平層閥、超程及中止裝置、超載安全閥；及
  - (d) 排氣旋塞和防止虹吸閥。
  
4. 電動升降機／液壓升降機調試及檢驗工作：申請人應對下列項目的維修保養工作具備監管經驗－
  - (a) 靜態檢驗－機械及電氣；
  - (b) 動態測試；
  - (c) 安全部件測試（即限速器、安全鉗、緩衝器、上行超速保護裝置及機廂不正常移動保護裝置等）；
  - (d) 對重及其裝置的檢查；
  - (e) 曳引機及制動器的檢查；
  - (f) 電力裝置／安全開關測試；
  - (g) 升降機井道裝置的檢查；
  - (h) 夾緊裝置（液壓升降機）；
  - (i) 棘爪裝置及限速截止閥（液壓升降機）；及
  - (j) 壓力測試及蠕動測試（液壓升降機）。
  
5. 自動梯／乘客輸送機安裝工作：申請人應對自動梯架及其接件、梯級、踏板、扶手帶、驅動機器、驅動鏈、安全裝置／開關掣、鎖定裝置、制動系統（主制動及緊急制動）、限速器、主控制板、電力線路／控制裝置等的安裝工作，具備監管經驗及／或知識。

6. 自動梯／乘客輸送機維修保養工作：申請人應對下列項目的維修保養工作具備監管經驗及／或知識－
  - (a) 鼓輪、滑輪及活動部件；
  - (b) 電力控制及安全裝置，例如裙板開關、扶手帶入口開關、緊急制動開關掣、驅動鏈／梯級鏈斷裂安全裝置、梯級沉降裝置、梳齒板開關等；及
  - (c) 主驅動裝置系統、梯級／踏板滾輪及扶手帶。
  
7. 自動梯／乘客輸送機調試及檢驗工作：申請人應對下列工作項目具備經驗－
  - (a) 靜態及動態測試；
  - (b) 驅動馬達及鏈測試；
  - (c) 電力控制的檢查；
  - (d) 電氣安全裝置及開關掣測試；
  - (e) 限速器測試；及
  - (f) 制動系統（主制動及緊急制動）的檢查。

除上文所述的註冊為升降機工程師及／或自動梯工程師所須具備的實際工作經驗外，其他與升降機工程或自動梯工程相關的經驗，例如對職業安全及健康、項目管理，財務管理、教學、顧問服務等的經驗，亦可視為相關經驗。



下述為筆試及面試範圍綱要：

1. 對相關條例、國際標準、工作守則和指引的理解：

- (a) 《升降機及自動梯條例》（第 618 章）；
- (b) 《升降機及自動梯設計及建造實務守則》；
- (c) 《升降機工程及自動梯工程實務守則》；
- (d) 相關的國際標準（如 BS5655（EN81）／ BS5656（EN115））；
- (e) 消防升降機的規定；
- (f) 《工廠及工業經營（載貨升降機）規例》（第 590 章）及由勞工處發出的《工作安全守則（升降機及自動梯）》；
- (g) 建築事務監督發出的《升降機及自動梯建築工程守則》及《耐火結構守則》和《設計手冊：暢通無阻的通道》的相關部分；及
- (h) 建造業議會發出的《升降機槽工程安全指引》。

2. 對下述法例／理論／通告的認識：

- (a) 《建築物（升降機）規例》（第 123E 章）；
- (b) 《建築物（自動梯）規例》（第 123D 章）；

(c) 升降機／自動梯的理論 -

包括（但不限於）：

- 升降機及自動梯的動力學；
- 升降機機廂及對重在各種不同情況下所需的間隙距離的計算及公式推理；
- 制動負荷的計算及公式推理；
- 下降制動距離的計算及公式推理；
- 所需的牽引滑輪摩擦及包裝角係數的計算及公式推理；
- BS5655/EN81，BS5656/EN115 規定的各類升降機及自動梯系統關鍵部件型式試驗的計算及公式推理；
- 升降機及自動梯系統的能力計算；及
- 自動梯系統支承結構與撓度值自重荷載計算。

(d) 機電工程署發出的升降機及自動梯通告。

3. 與升降機／自動梯的機械及安全設備相關的安裝、調試、測試、維修及操作實際經驗。

1. 升降機工程師或自動梯工程師辦理註冊續期的其中一項先決條件，是申請人必須已在緊接提交註冊續期申請之前的 5 年期間內，完成累計不少於 90 小時的持續專業發展培訓。
2. 申請人必須修畢與其職業發展相關的知識或技能培訓課程或自學計劃，方可視作達至持續專業發展培訓的要求。升降機工程師或自動梯工程師可透過持續專業發展培訓，維持、提升和擴闊本身的知識和技能，同時發展其專業的所需個人素質。
3. 關乎個人職業發展的直接相關技術事項和研習，例如財務管理、領導、法律事務、管理、安全等，以及參與和籌辦課程、研討會／專題討論會、會議和訪問等，均視作持續專業發展培訓。可為申請人現時工作發展提供所需的方法、指導、技能及能力的培訓，也視作與持續專業發展培訓相關。符合持續專業發展的要求時，應平衡兼顧下列課題：
  - (a) 職業安全及健康；
  - (b) 其他技術事宜；  
(如質量、環境、信息科技或其他技術及相關事宜)
  - (c) 一般專業事項  
(如企業管理、通訊、財務管理、領導、法律事務、市場營銷及其他相關事宜)
4. 「內部」持續專業發展活動不應佔去大部分持續專業發展培訓的時數。應就內部培訓備存記錄。
5. 持續專業發展培訓以 3 小時為半天，6 小時為一天計算。
6. 由註冊主任批核進修活動並非切實可行的做法。註冊升降機工程師／註冊自動梯工程師必須按本身的個別情況，自行確定有關活動是否符合持續專業發展培訓的要求。註冊升降機工程師／註冊自動梯工程師須備存一本記錄冊，以記錄本身的持續專業發展培訓時數，並填寫一份聲明與註冊續期通知書一併提交。這是一項自我評核和自行申報安排，旨在推動註冊升降機工程師／註冊自動梯工程師進行更多持續專業發展培訓。
7. 持續專業發展培訓記錄冊應妥為保存，在有需要時出示以作證明。

# How to Apply - Registered Lift Engineer and/or Registered Escalator Engineer

## 1. Requirements for application for Registration as a Lift Engineer and/or an Escalator Engineer

The requirements on the qualifications and experience for application for registration as a lift engineer or an escalator engineer are detailed in Sections 78 & 90 of and Parts 2 & 4 of Schedule 9 to the Lifts and Escalators Ordinance (“LEO”) (Cap. 618). An Applicant must possess appropriate qualifications, training and experience before he/she makes an application for registration as a lift engineer and/or an escalator engineer.

An individual is eligible for application for registration as a lift engineer or an escalator engineer if he/she has the qualifications and experience specified in any one of the following routes (i.e. ROUTE 1 to ROUTE 3):

ROUTE 1	is a registered professional engineer (RPE) in mechanical engineering, marine and naval architecture engineering, electrical engineering, electronics engineering, building services engineering, or control, automation and instrumentation engineering; and
	has an aggregate period of not less than 2 years’ relevant working experience in lift works or escalator works ( <i>see also Remark *</i> ).
ROUTE 2	has a bachelor degree in mechanical engineering, marine and naval architecture engineering, electrical engineering, electronic engineering, building services engineering, or such equivalent or higher qualifications as the Registrar may approve; and
	has an aggregate period of not less than 4 years’ relevant working experience in lift works or escalator works ( <i>see also Remark *</i> ).

Route 3 was terminated on 1 May 2018.

ROUTE 3	has a higher diploma or higher certificate in mechanical engineering, electrical engineering, electronic engineering, building services engineering or marine engineering from the Vocational Training Council or any technical institution, or such equivalent or higher qualifications as the Registrar may approve; and
	has - (1) completed an apprenticeship of not less than 2 years in mechanical engineering, electrical engineering, electronic engineering, building services engineering or marine engineering and has an aggregate period of not less than 3 years acquired following completion of the apprenticeship working experience in lift works or escalator works; or (2) an aggregate period of not less than 5 years’ working experience in lift works or escalator works ( <i>see also Remark *</i> ).

### Remark

\* Practical experience in lift works will be required for registration as a lift engineer, whereas practical experience in escalator works will be required for registration as an escalator engineer. The aggregate periods for lift works and escalator works may overlap if the Applicant was engaged in both types of works over the same period of time.

### (a) Requirements for renewal of registration

Every registered lift engineer or registered escalator engineer applying for renewal of registration as a lift engineer or an escalator engineer is required to have:

- (i) been engaged in carrying out lift works or escalator works for an aggregate period of not less than 1 year within the last 5 years before the date of submission of the application for renewal of registration; and

- (ii) kept abreast of technological development by attaining not less than 90 hours of continuing professional development training courses in the last 5 years before the date of submission of the application for renewal of registration.

**(b) Relevant working experience**

Please refer to the guidelines in **ANNEX 1** for determining relevant working experience for registration as a lift engineer and/or an escalator engineer.

## 2. Transitional Arrangements

There are two (2) kinds of transitional arrangements for acquiring registration as lift/escalator engineers under the Lifts and Escalators Ordinance (LEO).

Lift/Escalator engineers who are registered under the Lifts and Escalators (Safety) Ordinance (Cap. 327) will be regarded as registered under the LEO when it comes into force. They can continue to renew their registration at intervals not exceeding 5 years, provided that they can satisfy the renewal requirements as specified in item 1(a) above. It is a grandfathering arrangement. However, once they leave the registration system, they will be required to comply with the full registration requirements as stipulated in the LEO, i.e. they must obtain the requisite academic and professional qualifications.

Routes 2 and 3 are transitional arrangements and will be terminated at appropriate times. Route 3 was terminated on 1 May 2018. The exact timing for termination of Route 2 will be reviewed in 2023.

## 3. Application Procedures

The procedures for application for registration and application for renewal of registration are as follows:

**(a) For application for registration and application for renewal of registration as a lift engineer and/or an escalator engineer, obtain an application form (Form LE36) from:**

- The Customer Services Office, EMSD, G/F, 3 Kai Shing Street, Kowloon, Hong Kong;
- Telephone hotline: 1823 (for a fax copy);
- Government Forms web site : <http://www.info.gov.hk/forms>; or
- EMSD web site : [www.emsd.gov.hk](http://www.emsd.gov.hk) (select "Public Forms")

**(b) Complete the application form according to the given instructions.**

**(c) Submit the completed application form together with supporting documents and the following prescribed application fee in person or by mail to the Customer Services Office, EMSD. (Note: Any application fee received will not be refunded regardless of the result**

of application.):

Type of Application	Application Fee
Registration as a lift engineer <u>or</u> an escalator engineer	HK\$4,620
Renewal of registration as a lift engineer <u>or</u> an escalator engineer	HK\$ 515
Registration as both a lift engineer <u>and</u> an escalator engineer	HK\$4,870
Renewal of registration as both a lift engineer <u>and</u> an escalator engineer	HK\$ 535

- (i) Applicant can submit the application and the prescribed application fee to the Customer Services Office at G/F, Electrical and Mechanical Services Department Headquarters, 3 Kai Shing Street, Kowloon Bay, in person during the following office hours:

Monday to Friday: 9:00 a.m. to 5:15 p.m.  
Saturday, Sunday and Public Holidays: Closed

- (ii) Applicant can also submit the application form, accompanied by copies of relevant documents and application fee in the form of a cheque, to our Customer Services Office at G/F, Electrical and Mechanical Services Department Headquarters, 3 Kai Shing Street, Kowloon Bay, by post.

All cheques should be made payable to 'The Government of the Hong Kong Special Administrative Region' and crossed. Cheque must not be made payable to any individual officer. Post-dated cheque will not be accepted.

Applications for renewal of registration should normally be made within the period at least 1 month before and no earlier than 4 months before the expiry date of the current registration.\* Please

note requirements under the Section 79(2) of the Lifts and Escalators Ordinance that the submission of the application for renewal should be within the period specified by the Registrar. The registration as a lift engineer and/or an escalator engineer is normally valid for 5 years.

#### 4. Application Details

Applicant is required to submit the duly completed Form LE36, one recent colour passport photograph (35mm x 50mm recent photo) and the prescribed application fee, together with the following copies of documents in support of the application to the Electrical and Mechanical Services Department:

##### (a) Application for Registration

- (i) Hong Kong Identity Card/passport; (Copy of the identity card/passport is not required if the applicant produces his/her original identity card/passport to our Customer Services Office at the time of his/her submission of the application form.)
- (ii) Certificates or testimonials of professional qualifications;
- (iii) Certificates or testimonials of relevant education and academic qualifications;
- (iv) Certificates or testimonials of apprenticeship (only applicable to applicant who intends to acquire registration with Route 3 qualifications);
- (v) Documentary proof of written examination for candidates applying for registration as lift engineers and/or escalator engineers; and
- (vi) Documentary proof of relevant working experience.

## (b) Application for Renewal of Registration

- (i) Certificates or testimonials of Continuing Professional Development Training course; and
- (ii) Documentary proof of relevant working experience.

## 5. Assessment of Application

### (a) Application for Registration

- (i) The application is assessed to determine whether the applicant meets the basic requirements in qualifications/experience as stipulated in item 1 above. If necessary, the Registrar may request the Applicant to provide further supporting documents/information.
- (ii) The Applicant has passed the written examination designated for candidates to apply for registration as lift engineers and/or escalator engineers and submitted the application for registration as a lift/escalator engineer within the written examination validity period. The syllabus of the written examination and interview is attached in **ANNEX 2**. (Applicants who have the specified RPE qualifications are not required to attend or pass the written examination.)
- (iii) If the Applicant's qualifications/experiences meet the requirements for registration, an invitation letter would be issued to the Applicant for an interview. The interview aims at verifying the conversancy of the Applicant in the subject matters covered in **ANNEX 2** and following the interview a recommendation will be made on whether the applicant is suitable for registration as a lift engineer and/or an escalator engineer or not. If the Applicant passes the interview, his/her particulars will be included in the Register of lift engineers and/or Register of escalator engineers.

- (iv) The particulars of the successful applicant to be shown in the Register of lift engineers and/or Register of escalator engineers include:

- the name of the registrant;
- the registration number;
- the date of registration; and
- the date on which the registration expires.

- (v) The Applicant will be issued a signed reply letter together with the certificate(s) of registration and registration card as appropriate.

### (b) Application for Renewal of Registration

- (i) The application is assessed to determine whether the Applicant (a) has engaged in carrying out lift works or escalator works or both types of works for an aggregate period of not less than 1 year within the last 5 years before the date of submission of the application for renewal of registration, and (b) has attained not less than 90 hours of Continuing Professional Development (CPD) training courses as stipulated in **ANNEX 3** – “Requirements of the Continuing Professional Development Training Course for Renewal of Registration of Lift Engineers or Escalator Engineers”. If necessary, the Registrar may request the applicant to provide further supporting documents/information.
- (ii) If the Applicant's qualifications/experiences meet the requirements for renewal of registration, his/her registration as a lift engineer and/or an escalator engineer will be extended for 5 years.
- (iii) The Applicant will be issued a signed reply letter together with the certificate(s) of registration and registration card as appropriate.

## Guideline for Determining Relevant Working Experience for Registration as a Lift Engineer and/or Escalator Engineer

### 6. Enquiries

The Customer Services Office, EMSD, G/F, 3 Kai Shing Street, Kowloon, Hong Kong (Operating hours: 9:00 a.m. - 5:15 p.m. on Monday to Friday; closed on Saturday, Sunday and public holiday)

Tel. : 1823 (Hotline)

Fax : 2895 4929

Email : info@emsd.gov.hk

Note: This is NOT a legal document and is prepared for general information only.

Sections 78 and 90 of and Parts 2 & 4 of Schedule 9 to the Lifts and Escalators Ordinance stipulate that the Applicant seeking registration as a lift engineer and/or an escalator engineer should have 2 to 5 years (depending on the qualification routes) relevant working experience, and has the necessary practical experience. Relevant and practical working experience, in relation to the registration as a lift engineer or an escalator engineer, means experience in carrying out lift works or escalator works, either independently or under supervision. The Applicant should have obtained relevant working experience on installation, commissioning, examination, maintenance, repair, alteration, or demolition of lifts and/or escalators. Further elaboration of the relevant and practical working experience is given below:

1. In relation to lift installation works, the Applicant should have experience in supervisory works and/or knowledge for the installation of motors, traction machines, main control panels, safety devices, locking devices, suspension elements and their attachments, braking systems, overspeed governors, car/counterweight safety gears, buffers, clamping devices, pawl devices, electrical wiring/control, etc.
2. In relation to maintenance of electric traction lifts, the Applicant should have experience in supervisory works and/or knowledge for maintenance of the following items:
  - (a) lift traction machines and the brakes;
  - (b) safety components (i.e. overspeed governors, safety gears, buffers, door locks, ascending car overspeed protection means, unintended car movement protection means, etc.);
  - (c) control panels and electrical devices/switches;
  - (d) counterweights and their fixings, guide rails, and guide shoes;
  - (e) lift shaft equipment; and
  - (f) lift car equipment.

3. In relation to maintenance of hydraulic lift, the Applicant should have experience in supervisory works and/or knowledge for maintenance on the following items:
  - (a) levelling switches;
  - (b) pipework, joints, bolts and fixings, stop valves, oil reservoirs, pumps and motors;
  - (c) control valves, pilot and levelling valves, overrun and cut-off devices, overload relief valves; and
  - (d) air release cocks and anti-syphon valves.
  
4. In relation to commissioning and examination of electric traction lifts/hydraulic lifts, the Applicant should have experience in the following items:
  - (a) static examination - mechanical & electrical;
  - (b) dynamic tests;
  - (c) tests of safety components (i.e. overspeed governor, safety gear, buffer, door lock, ascending car overspeed protection means, unintended car movement protection means, etc.);
  - (d) checking of counterweight and its associated equipment;
  - (e) checking of traction machines and brakes;
  - (f) testing of electrical safety devices/switches;
  - (g) checking of lift shaft equipment;
  - (h) testing of clamping devices (hydraulic lift);
  - (i) testing of pawl devices & rupture valves (hydraulic lift); and
  - (j) creep test and pressure test (hydraulic lift).

5. In relation to escalator/passenger conveyor installation works, the Applicant should have experience in supervisory works and/or knowledge for installation of escalator frameworks and their connection, escalator steps, pallets, handrails, driving machines, driving chains, safety devices/switches, locking devices, braking systems (operational brake and auxiliary brake), overspeed governors, main control panels, electrical wiring/control, etc.
  
6. In relation to maintenance of escalators/passenger conveyors, the Applicant should have experience in supervisory works and/or knowledge for maintenance of the following items:
  - (a) drums, pulleys and moving parts;
  - (b) electrical control and safety devices, such as skirt panel switches, handrail inlet switches, emergency stop switches, broken drive/step chain devices, step sagging devices, combplate switches, etc.; and
  - (c) main drive systems, step/pallet rollers, handrails, etc.
  
7. In relation to commissioning and examination of escalators/passenger conveyors, the Applicant should have experience in the following items:
  - (a) static & dynamic examination;
  - (b) testing of driving motors and chains;
  - (c) checking of electrical control;
  - (d) testing of electrical safety devices and switches;
  - (e) testing of overspeed governors; and
  - (f) checking of braking systems (operational brake and auxiliary brake).

In addition to the practical working experience for registration as a lift engineer and/or an escalator engineer, experience such as occupational safety & health, project management, business management, lecturing, consultancy services in relation to lift works or escalator works would also be regarded as relevant experience.



The syllabuses cover the following areas:-

1. Comprehension of relevant ordinances, International Standards, codes of practice, and guidelines:

- (a) Lifts and Escalators Ordinance (Chapter 618);
- (b) Code of Practice on the Design and Construction of Lifts and Escalators;
- (c) Code of Practice for Lift Works and Escalator Works;
- (d) Relevant International Standards (e.g. BS 5655(EN81) / BS5656(EN115));
- (e) Requirements of Fireman's Lift;
- (f) Factories and Industrial Undertakings (Goods Lifts) Regulations (Chapter 59O) and Code of Practice for Safety at Work (Lift and Escalator) issued by the Labour Department;
- (g) Code of Practice on Building Works for Lifts and Escalators, relevant parts of Code of Practice for Fire Resisting Construction and Design Manual Barrier Free Access issued by the Building Authority; and
- (h) Guidelines on Safety of Lift Shaft Works issued by Construction Industry Council.

2. Knowledge of:

- (a) Building (Lifts) Regulations (Chapter 123E);

(b) Building (Escalators) Regulations (Chapter 123D);

(c) Lift/escalator theories –

such as:

- Mechanics of lifts and escalators;
- Calculations and formula derivation for clearance distances required for lift car and counterweight under various situations;
- Calculations and formula derivation for braking load required;
- Calculations and formula derivation for gravity stopping distance;
- Calculations and formula derivation for coefficient of friction and wrapping angle on traction sheaves required;
- Calculations and formula derivation for type tests of various critical components of lift and escalator systems as required in BS5655/EN81, BS5656/EN115;
- Calculations on capacity of lift and escalator systems; and
- Calculations on dead weight loading on supporting structure & deflection values of escalator systems.

(d) Circular letters from EMSD related to lifts and escalators.

3. Practical experience in connection with the installation, commissioning, testing, maintenance and operation of machinery and safety equipment of lifts and escalators.

## Requirements of the Continuing Professional Development Training Courses for Renewal of Registration as A Lift Engineer or an Escalator Engineer

1. One of the pre-requisites for renewal of registration as a lift engineer or an escalator engineer is that the Applicant must have completed CPD trainings for an aggregate period of not less than 90 hours in the last 5 years immediately before the applicant submits his application for renewal of registration.
2. The attainment of CPD trainings should be made by way of completion of training courses or self-learning programmes for knowledge or skills relevant to one's career development. CPD is the means by which a lift engineer or an escalator engineer can maintain, improve and broaden their knowledge and skills, and develop his / her other personal qualities while working in the profession.
3. Matters of direct technical relevance and studies related to one's career development such as financial management, leadership, legal matters, administration, safety, etc., and participation in and organization of courses, seminars/symposia, conferences, visits, etc., are regarded as CPD. Trainings which provide one with the tools, guidance, skills and competences needed for progressing in his/her current role are relevant. Appropriate balance should be maintained among the following subject areas in satisfying CPD requirements:
  - (a) Occupational Safety & Health;
  - (b) Other Technical Matters;  
(Such as quality, environmental, information technology, or other technical and related matters)

- (c) General Professional Matters;  
(Such as business management, communication, financial management, leadership, legal aspects, marketing and other related matters)
4. 'In-house' CPD activities should not be the majority of CPD hours. In-house training records have to be kept.
5. Half CPD day and one CPD day can be specified as 3 hours and 6 hours, respectively.
6. It is not practical for the Registrar to approve CPD activities. Registered lift/escalator engineers themselves must determine whether an activity satisfies the CPD requirement or not in their own particular circumstances. Registered lift/escalator engineers are required to record their CPD hours in a log book and complete a Declaration Form, which will be attached with the renewal subscription advice. This is a self-assessment and self-declaration exercise aimed at promoting CPD among registered lift/escalator engineers.
7. The CPD record log should be kept and provided for substantiation, if required.