



Our reference 本署檔號 :

(61) in EMSD/LESD 7-2/4A Pt II

Telephone 電話號碼 : 2808 3861

Your reference 來函檔號 :

Facsimile 圖文傳真 : 2504 5970

3 Mar 2022

To: All Registered Lift/Escalator Contractors
All Registered Lift/Escalator Engineers

Dear Sirs,

Circular No. 5/2022 – New Model of Oral Interview for Registration as Lift/Escalator Engineers

Registered lift/escalator engineers (“REs”) play a crucial role to help upkeep our high lift/escalator safety standard through examination and certification of safe working order of lifts/escalators, and recommending rectification measures for failure cases. To ensure candidates being accepted for registration as lift/escalator engineers under the Lifts and Escalators Ordinance are capable of discharging the functions of REs and coping with challenges faced by the profession, a new model of oral interview for candidates applying for registration as lift/escalator engineers will be adopted commencing from June 2022.

The new model of oral interview will consist of questions on three different aspects, namely (1) applicable laws, codes, guidelines, and circulars related to lift/escalator safety/works, (2) testing/examination of lifts/escalators, and (3) problem-solving covering trouble-shooting and investigation of incidents related to lifts/escalators. Candidates are required to answer questions and demonstrate their conversancy in the three aspects within fixed time periods in the oral interview. Assessment will be based on the candidates’ understanding of the topics being asked. A brief note on the new model of oral interview, together with some sample questions, is included in Annex I for reference.

We have arranged to hold an online briefing on 28 April 2022 to elaborate on the new oral interview model and answer questions potential candidates and contractors’ representatives may have on the new model. Parties interested in attending the briefing may complete the reply slip attached to Annex II and have it sent to lesd@emsd.gov.hk on or before 31 March 2022.

Registered lift/escalator contractors please help draw the attention of potential candidates to the contents of this circular.

If you have any question on this subject, please contact our officer on tel. number 3757 6120.

Yours faithfully,



(LAU Lik-kee)
for Director of Electrical and Mechanical Services

Encl.

c.c. The Lift and Escalator Contractors Association

The Registered Elevator and Escalator Contractors Association Limited

International Association of Elevator Engineers (HK-China Branch)

The Hong Kong Institution of Registered Engineers (Lift & Escalator)

Interview Assessments for Registration as Lift Engineer / Escalator Engineer

Introduction

1. Candidates seeking registration as lift engineer or escalator engineer under the Lifts and Escalators Ordinance (“LEO”) are required to attend an interview to demonstrate their conversancy and suitability for taking on the role and discharging the functions of a registered lift/escalator engineer (“RE”). The interview aims to assess the versatility of the candidate. Questions related to the following **three aspects** of competences/capabilities of REs will be asked in the interview:
 - i. Knowledge in trade practice and requirements for carrying out lift/escalator works, covering legislative requirements, safety measures, relevant codes of practice, circulars, guidelines, international standards, etc.;
 - ii. Conversancy in conducting testing and examination of lifts/escalators and considerations/concerns related to issue of safety certificates; and
 - iii. The ability in solving problems associated with lifts/escalators, including trouble-shooting, failure analysis, investigation of lift/escalator incidents, and proposing rectification measures.

Items to be Covered

2. The interview will be made up of three consecutive parts with questions to assess the candidate’s competences as follows:

Part 1 - Basic understanding of trade practice, requirements for carrying out lift/escalator works, knowledge in relevant laws, codes, guidelines, and circulars.

This part focuses on the candidate’s understanding of relevant trade practices for lift/escalator works, the LEO, Code of Practices (Design Code, Works Code), relevant international standards (e.g. EN81, EN115, EN14010), guidelines, and effective technical circulars. On top of the above, relevant provisions of other laws (e.g. the Factories and Industrial Undertakings Ordinance, the Buildings Ordinance) will also be touched on. Candidates are also required to show good understanding of relevant definitions, duties, practices, procedures, works requirements, and professional ethics of an RE.

Sample Questions

- I) Elaborate on the kind of incidents which are regarded as reportable incidents.
- II) Elaborate on the difference in respect of the duties of an RE undertaking testing/examination (i) following completion of installation, (ii) at periodic intervals, and (iii) after completion of major alteration of a lift/escalator.
- III) Evaluate the risks/hazards of carrying out lift works in the lift pit and briefly explain how these risks/hazards can be mitigated.
- IV) Describe, based on EN81-50, how the safety factor of the suspension ropes of

an electric traction lift is calculated.

- V) Elaborate on the engineering considerations for total replacement of an aged lift/escalator.

Part 2 - Testing and examination of lifts / escalators. This part focuses on the candidate's conversancy in testing and examination of lifts, covering electric traction lifts, hydraulic lifts, vertical lifting platforms, stairlifts, and mechanized vehicle parking systems (for candidates applying for registration as lift engineer), and/or escalators/passenger conveyors (for candidates applying for registration as escalator engineer). The candidate will also be asked about the testing of specific safety equipment and/or safety components of a lift or escalator as the case may be. The candidate is also required to show good understanding of technical requirements, proper procedure, and logics related to testing and examination of lifts/escalators as appropriate.

Sample Questions

- I) Elaborate on the proper workflow of testing/examination of an electric traction lift or an escalator.
- II) Elaborate on the workflow of testing/examination of a MVPS.
- III) Elaborate on the testing methods for two different types of overspeed governors.
- IV) Elaborate on the considerations for proving the proper functioning of an UCMP means.
- V) Elaborate on the considerations for certifying an escalator to be in safe working order.

Part 3 - Problem-solving covering trouble-shooting and investigation of incidents related to lifts/escalators. This part focuses on the candidate's conversancy in solving problems associated with lift/escalator installations as well as those arise from installation and/or major alteration of lifts/escalators. The candidate will be asked about good engineering and logical approach and methodology for handling lift/escalator failure, and identification of potential cause(s) of failure, and propose suitable measures for prevention of recurrence of such failures. The candidate's awareness on necessary safety precautions for undertaking tests/assessments, risks associated with the breakdown phenomenon, related regulatory requirements, and capability in making sound engineering judgement, will be assessed.

Sample Questions

- I) Elaborate on the attempt and work sequence for investigating a case of slowly ascending lift car with both car and landing doors opened.

- II) Elaborate on the considerations for converting the manual hinge lift landing door and manual sliding scissor gate on car door of a lift to 2-panel automatic horizontal sliding door.
- III) Elaborate on the causes and remedial measures for a case of insufficient traction.

Allocation of Time and Scores for Each Part of the Oral Interview

3. The three parts of the oral interview will be conducted in sequence for preset number of questions and durations. The candidate is expected to answer questions with reasonable comprehensiveness and as many questions as possible to maximize his/her score for each part. Once the time limit for a particular part is reached, the interviewer will commence the subsequent part by asking a new question. The candidate should give clear and concise answers, and avoid guess work or dragging on to waste the precious answering time. The allocation of time and scores for the individual parts are tabulated below:

Part of Assessment \ Duration	Candidates sitting for one subject (i.e. lift OR escalator)	Candidates sitting for both subjects (i.e. lift AND escalator)	Score in Percentage
Part 1	30 mins	45 mins	30%
Part 2	30 mins	45 mins	30%
Part 3	60 mins	90 mins	40%
Total	120 mins	180 mins	100%

Results

4. The result of interview for individual candidate will be classified in accordance with the overall performance of the candidate in the interview:
- i. **Passed:** A full RE registration will be granted to the candidate.
 - ii. **Failed:** The candidate will normally be allowed to re-apply for interview after **six to twelve months** (with the exact duration to be determined by the overall score of the candidate – the higher the overall score, the shorter will be the interval for re-application). It should be noted that candidates making re-application for interview must be in possession of **valid pass results of written examination** (i.e. issued within the immediate past two years).

General Legislation Division 1

Electrical and Mechanical Services Department

March 2022

**Briefing on New Model of Oral Interview
for Registration as Lift and/or Escalator Engineers**

Reply Slip

(Submitted by 8 April 2022 by email to lesd@emsd.gov.hk)

To: EMSD

Date: 28 April 2022 (Thursday)

Time: 15:00 - 17:00

Contact Person: _____

Telephone: _____

Email: _____

Company Name: _____
(If applicable)

Number	Name of Attendee (Full Name in English)	Name of Attendee (Full Name in Chinese)	Telephone No./ Mobile Phone No.	Email Address
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				