香港特別行政區政府 機電工程署 香港九龍啟成街 3 號

Electrical and Mechanical Services Department Government of the Hong Kong Special Administrative Region 3 Kai Shing Street, Kowloon, Hong Kong www.emsd.gov.hk

Our reference 本署檔號:

EMSD/LESD 7-2/4A Pt II

Your reference 來函檔號:

Telephone 電話號碼: 2808 3861

25 January 2024

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

Dear Sir/Madam,

Circular No. 2/2024 Statistics of Reportable Lift/Escalator Incidents of 2023

This circular disseminates the statistics of reportable lift/escalator incidents of 2023 for trade practitioners' reference and introduction of appropriate improvement measures. The breakdown figures of the reportable incidents are given in the attached summary tables.

There were 350 reportable lift incidents and 2 765 reportable escalator incidents in 2023. The number of reportable lift incidents per 1 000 lifts in 2023 was 29% higher than that in 2022, while the number of escalator incidents per 100 escalators in 2023 was 47% higher than that in 2022. The lift incident rate in 2023 was similar to those in years before the epidemic, while there was a large increase in escalator incident rate in 2023 due essentially to the upsurge in utilization of escalators at public transport stations following resumption of normalcy. We hope the trade will continue to join hands to suppress the incident rates to a lower level in 2024. Most of the incidents in 2023 were due to passengers' behaviors such as inattentive collisions with closing/opening doors in lifts or loss of balance on escalators. 28 reportable lift incidents and 13 reportable escalator incidents were due to equipment faults, which resulted in The majority of injuries were due to differential levelling of the lift cars, unsynchronized speeds between handrails and steps of escalators due to malfunction of handrail drive unit, steel cords protruding from the surface of escalator handrails, and emergency stop of escalator operation due to malfunction of components. There were three industrial incidents related to lift works and another three related to escalator works recorded in 2023.

Closer attention in carrying out lift/escalator works, in particular regarding leveling devices of lifts and handrails of escalator, together with quality checking can help eliminate those incidents due to equipment failure, whereas greater awareness of the responsible persons (RPs) and users can help lower the number of cases due to passenger behaviors. Please help remind your frontline staff to pay attention to lift/escalator works and arouse the attention of RPs and users of safe use of lifts/escalators.

We hope the sharing of the incident statistics will alert practitioners to be more attentive and facilitate the trade or relevant interested parties to exert efforts in devising appropriate measures and innovative ideas/solutions for avoiding lift/escalator incidents.

If you have any questions on the subject of this letter, please contact our officer on telephone number 2808 3174.

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

The International Association of Elevator Engineers (HK-China Branch)

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

The Hong Kong General Union of Lift and Escalator Employees

Table 1 – 2023 Lift Incident Statistics

Description	Quantity
Total no. of incidents Note 1	350
No. of incidents due to equipment fault	28 Note 2
No. of injuries due to equipment fault	28
No. of fatalities due to equipment fault	0
No. of incidents due to passenger behavior	271
No. of injuries due to passenger behavior	272
No. of fatalities due to passenger behavior	0
No. of incidents during lift works	3
No. of injuries during lift works	5
No. of fatality during lift works	0
No. of incidents due to external factor	48
No. of injuries due to external factor	48
No. of fatalities due to external factor	1 Note 3

Remarks

- Note 1 The number of incidents is based on the dates when the respective incidents were made known to EMSD.
- Note 2 (i) Passenger tripping due to levelling difference of lift car at landing arisen from leveling device malfunction (16 cases).
 - (ii) Passenger tripping due to levelling difference of lift car at landing arisen from malfunction of electrical component (5 cases).
 - (iii) Passenger tripping due to levelling difference of lift car at landing arisen from poor contacts of the door lock safety circuit (3 cases).
 - (iv) Emergency stop of lift operation due to defective door mechanism (1 case).
 - (v) Emergency stop of lift operation due to malfunction of control device of the drive machine (1 case).
 - (vi) Emergency stop of lift operation due to poor contacts of the door lock safety circuit (1 case).
 - (vii) Breakage of suspension ropes of a lift (1 case).
- Note 3 A worker responsible for cleaning the E&M service plant room of a building was found to have fell from height to his death from the emergency door of a lift into the lift pit.

Table 2 – 2023 Escalator Incident Statistics

Description	Quantity
Total no. of incidents Note 1	2 765
No. of incidents due to equipment fault	13 Note 2
No. of injuries due to equipment fault	16
No. of fatalities due to equipment fault	0
No. of incidents due to passenger behavior	2 624
No. of injuries due to passenger behavior	2 846
No. of fatalities due to passenger behavior	0
No. of incidents during escalator works	, 3
No. of injuries during escalator works	3
No. of fatalities during escalator works	0
No. of incidents due to external factor	125
No. of injuries due to external factor	135
No. of fatalities due to external factor	0

<u>Remarks</u>

- Note 1 The number of incidents is based on the dates when the respective incidents were made known to EMSD.
- Note 2 (i) Unsynchronized handrail operation of an escalator due to malfunction of handrail drive unit (6 cases).
 - (ii) Protruded steel wire(s) from the surface of the handrail of an escalator (4 cases).
 - (iii) Emergency stop of the escalator due to malfunction of missing step device / poor contact of control wirings (3 cases).