

Our reference 本署檔號 :
(58) in EMSD/LESD 7-2/4 Pt. 4

Telephone 電話號碼: 2808 3861

Your reference 來函檔號 :

Facsimile 圖文傳真: 2504 5970

30 August 2010

All Registered Lift Contractors and Engineers

Dear Sirs,

Circular No. 14/2010

Amendment of Code of Practice on the Design and Construction of Lifts and Escalators - Requirements to Handle Unintended Lift Car Movements

Pursuant to section 27G of the Lifts and Escalators (Safety) Ordinance, Cap. 327, the Code of Practice on the Design and Construction of Lifts and Escalators (2010 Edition) (the Design Code) has been amended by incorporating requirements to handle unintended lift car movements.

The changes have been provided for in Amendment No. 1 of the Design Code, a copy of which is attached herewith for your reference. Please note that the changes covered in Amendment No. 1 forming part of the Design Code shall become effective as from 1 September 2011 and the new requirements shall be applicable to lifts with tendering date on or after 1 September 2011.

Yours faithfully,



(George LING)
for Director of Electrical & Mechanical Services

- cc. Director of Housing
Director of Architectural Services
The Lift and Escalator Contractors Association
The Registered Elevator and Escalator Contractors Association Limited
The International Association of Elevator Engineers
The Hong Kong General Union of Lift and Escalator Employees

G28/28 SF1 Pt. IV

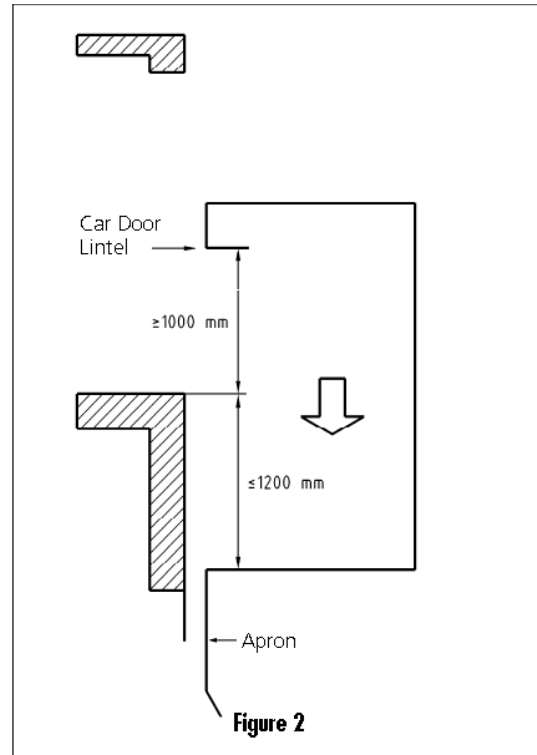
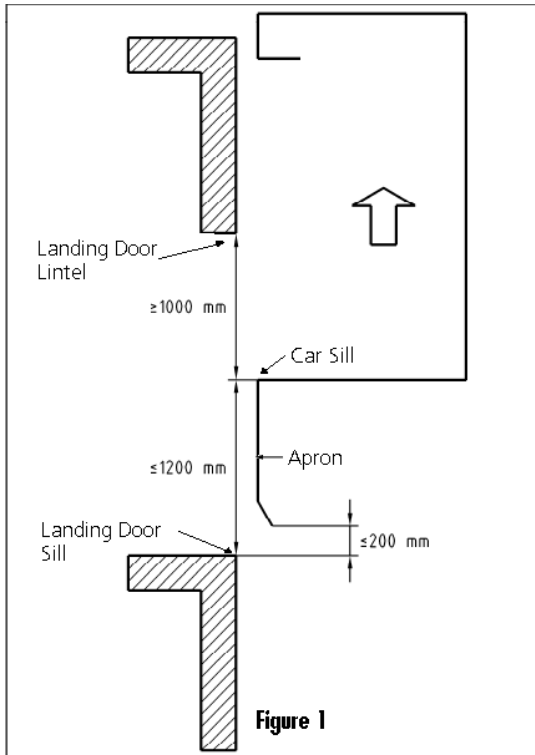
Code of Practice
On the Design and Construction of Lifts and Escalators
(2010 Edition)

AMENDMENT No. 1 of 2010 Edition
Requirements to Handle Unintended Lift Car Movement

(Effective as from 1 September 2011 and applicable to lifts with tendering date on
or after 1 September 2011)

Replace the original Clauses 5.14, 5.14.1 – 5.14.4 by the following Clauses:

Item	Clause	Description
1	Section E Part 1 Clause 5.14	Protection Against Unintended Car Movement A traction drive lift shall be provided with a means to stop unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position, as a result of failure in any single component of the lift machine or drive control system upon which the safe movement of the car depends, except failure of the suspension ropes or chains and the traction sheave or drum or sprockets of the machine. (Note: A failure of the traction sheave includes a loss of traction.) The means shall conform to the following:
	5.14.1	The means shall detect unintended movement of the car away from the landing and cause the car to come to a stop at the latest in a distance of 1,200 mm as measured from the landing sill.
	5.14.2.1	Subsequent to operation of the unintended car movement protection means for an upward moving lift car, the clearance between the landing door sill and the apron of the stopped lift car shall not exceed 200 mm and the free distance from car sill to landing door lintel shall not be less than 1,000 mm. (See Figure 1)
	5.14.2.2	Subsequent to operation of the unintended car movement protection means for a downward moving lift car, the horizontal distance between the sill or entrance frame of the stopped lift car and the wall of the well, from the landing sill to 1,200 mm downward, shall not exceed 150 mm and the free distance from landing sill to car door lintel shall not be less than 1,000 mm. (See Figure 2)



5.14.3

The means shall be capable of performing as required in Clause 5.14.1 without assistance from any lift component that, during normal operation, controls the speed or retardation, or stops the car, unless there is built-in redundancy and correct operation is self-monitored.

Machine brake according 8.4.2 is considered to have built-in redundancy.

A mechanical linkage to the car, whether or not such linkage is used for any other purpose, may be used to assist in this performance.

5.14.4

The means shall not allow a retardation of the car, with any load up to 100% of the rated load, in excess of $1 g_n$ during the stopping phase.

The means shall conform to the requirements of Clauses 5.13.4 - 5.13.9

Insert the following Clauses after Section E Part 1: Clause 5.14.4:

Item	Clause	Description
2	5.14.5	The means shall detect unintended movement of the car, shall cause the car to stop, and keep it stopped.
	5.14.6	The stopping element of the means, or the means keeping the car stopped may be common with those used for preventing overspeed in down direction, or preventing ascending car overspeed. The stopping elements of the means may be different for the down direction and for the up direction.
	5.14.7	<p>In the case of using the machine brake, self-monitoring could include verification of correct lifting or dropping of the mechanism or verification of braking force. If a failure is detected, next normal start of the lift shall be prevented.</p> <p>The unintended car movement with open doors protection means is regarded as a safety component and shall be type tested to the requirements of Annex F.8 of EN81-1, or other relevant international standards.</p>