LE/02/04

2808 3861

2895 4929

28 February 1996

All Registered Lift & Escalator Contractors
All Registered Lift & Escalator Engineers

Dear Sirs,

Circular No. 5/96
Code of Practice on the Design and Construction of Lifts and Escalators
- Amendment No. 4

Please be informed that the relevant provisions in respect of the operational, electrical and mechanical requirements for fireman's lifts have been established as Section F in the Code of Practice on the Design and Construction of Lifts and Escalators (the "Code of Practice") under section 27G of the Lifts and Escalators (Safety) Ordinance, Cap. 327. A copy of the provisions is attached herewith.

The requirements in Section F of the Code of Practice shall come into operation with effect from 1 April 1996, and shall apply to all fireman's lift in buildings with plans submitted to the Building Authority for approval on or after that date. Upon the taking effect of the provisions in Section F, paragraph 8(d) in Section A of the Code of Practice is deleted. Please note that Section F of the Code of Practice shall also apply to major alteration works which are tendered on or after 1 April 1996 and involve a change of the fireman's lift control.

Yours faithfully,

(Law Yu-wing)
for Director of Electrical & Mechanical Services

c.c. AD/BS
D of Housing (Attn.: TS/1)

YKH/GMWC/tlp

Section F Fireman's Lifts

Contents

1. Planning Requirements

Reference shall be made, in ensuring compliance, to the Building (Planning) Regulations (Chapter 123) and the Code of Practice for Means of Access for Firefighting and Rescue issued by the Building Authority.

2. Specification

2.1 Lift Car

(i) The speed of the lift car shall be such that it will reach the topmost discharge point of the building in not more than 1 minute, calculating from the time when the lift doors at the level of designated point of entry where the fireman's switch is located are completely closed to the time when the lift doors at the topmost discharge point start to open.

(ii) Effective means shall be provided within the lift car to indicate the confirmation of all calls registered on the car control panel when the lift is in the fireman's lift operating mode.

2.2 Lift Doors and Landing Controls

(i) The lift shall be provided with automatic power operated horizontally sliding doors.

(ii) Failure of the landing call controls, such as short circuiting, whilst the lift is in the fireman's lift operating mode shall not affect operation of the fireman's lift.

(iii) The lift shall be provided with a sensitive door re-opening device which is not of light, flame, heat or smoke sensitive type and remains effective when the lift is under fireman's lift operating mode. Additional door re-opening devices of light, flame, heat or smoke sensitive type may be installed but shall be rendered inoperative once the Fireman's Switch is operated.

2.3 Fireman's Switch

(i) The fireman's lift shall be provided with a suitable control switch, clearly indicated as Fireman's Switch (消防掣), at the designated point of entry to be agreed with the Fire Services Department. To enable Fire Services personnel to gain control over the lift, operation of the Fireman's Switch shall override the instructions registered inside the lift and return the lift to the designated point of entry as quickly as mechanically possible.

(ii) When all the lifts in a common lift shaft are designated as fireman's lifts, they shall be operable from one Fireman's Switch.

(iii) For easy identification of Fireman's Switch, a red and white diagonal striped backing shall be provided behind the glass of the Fireman's Switch as shown in the diagram in Annex I.

2.4 Power Supply

(i) The power supply to the fireman's lift(s) shall be connected to a sub-main which shall be exclusive and independent of any other sub-main circuit. When a fireman's lift is one of a group of lifts, the other lifts may be fed from the same supply, provided it is adequate for this

purpose, and that arrangements are such that a fault occurring in any other lift or the group will not affect in any way the operation of the fireman's lift.

(ii) The fireman's lift shall be connected to, and capable of being operated on, a secondary power supply which is independent of the primary power supply to the fireman's lift.

(iii) The secondary power supply shall be the emergency generator providing supply to the essential services as required in the Code of Practice for Minimum Fire Service Installations and Equipment. In a building where emergency generator is not required, the secondary power supply may be a supply from another sub-station which does not normally provide the incoming supply to the building, or a supply available from the live side of the main isolator of the building.

(iv) At the fireman's lift power supply isolator, labels shall be provided with the warning that the equipment may remain alive even after the primary power supply has been isolated.

2.5 Operation

(i) The operation of the fireman's lift shall protect the passengers from the effects of fire and smoke by keeping the lift doors automatically closed until operated to open from the inside. Therefore its operation shall be programmed in such a way that upon switching on the Fireman's Switch to gain control of the lift car, i.e. the lift being under fireman's lift operating mode, the Fire Services personnel need only take three simple steps to operate the lift.

(a) Press the desired floor button continuously until lift doors are fully closed; or press the "door close" button continuously to close lift door and register call by pressing the desired floor button.

(b) If another floor is desired, press floor button of that floor.

(c) On arrival at the desired floor, press "door open" button continuously until lift doors are fully open.

(ii) The operation of the fireman's lift shall comply with the flow chart F1 in Annex II.

(iii) On resetting the Fireman's Switch when the lift is at a floor other than the designated point of entry, the lift shall not resume normal operation and shall remain under fireman's lift operating mode until it returns to the designated point of entry and opens its doors fully.

(iv) Once the Fireman's Switch is switched on and the Fire Services personnel have gained control of the fireman's lift, the lift shall remain under the exclusive control of firemen despite any power supply interruption or changeover from normal power supply to the secondary one, or vice versa, for the fireman's lift. All calls prior to the power supply interruption or changeover shall be automatically cancelled. The operation of the fireman's lift shall then be as follows.

(a) In case the lift doors are not fully closed, on the re-establishment of power supply the doors shall automatically open if the lift stopped at a landing. The opening and closing of the doors shall be by pressing continuously the respective

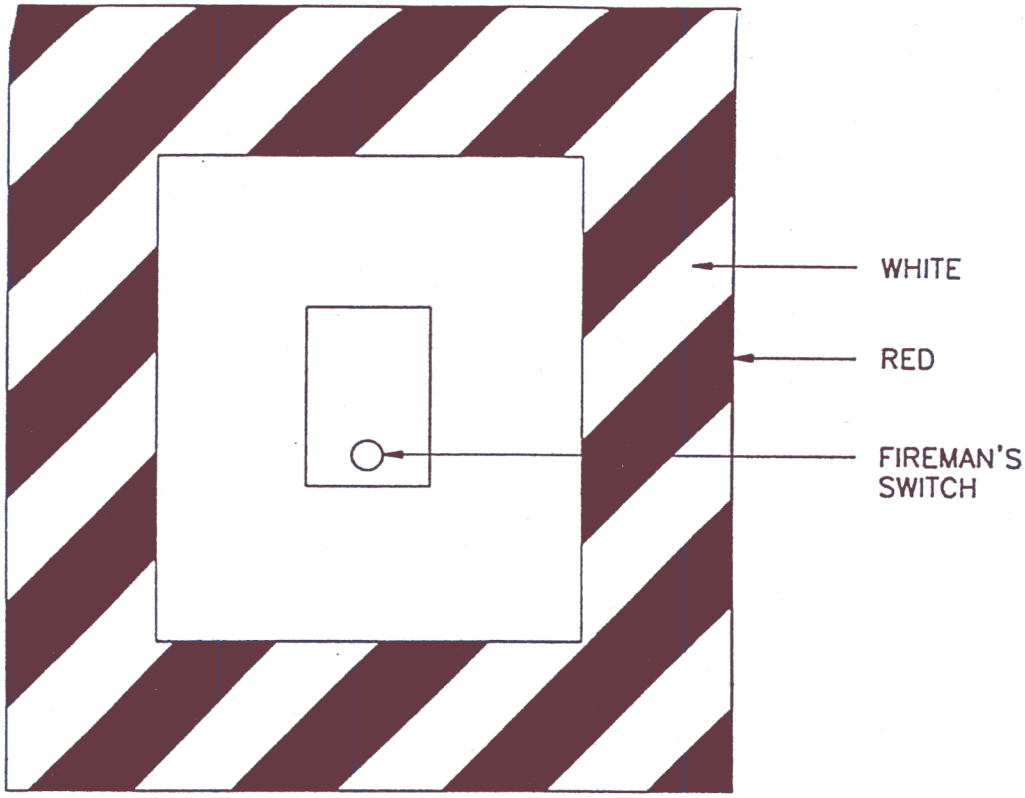
control buttons as under fireman's lift operating mode and the lift shall operate according to item (b) when the lift doors are fully closed.

(b) In case the lift doors are fully closed, once the power supply has been re-established the lift shall immediately resume the fireman's lift operational control as in flow chart F1; or as an alternative, return to the designated point of entry or the nearest landing below and resume the operational control as in flow chart F1.

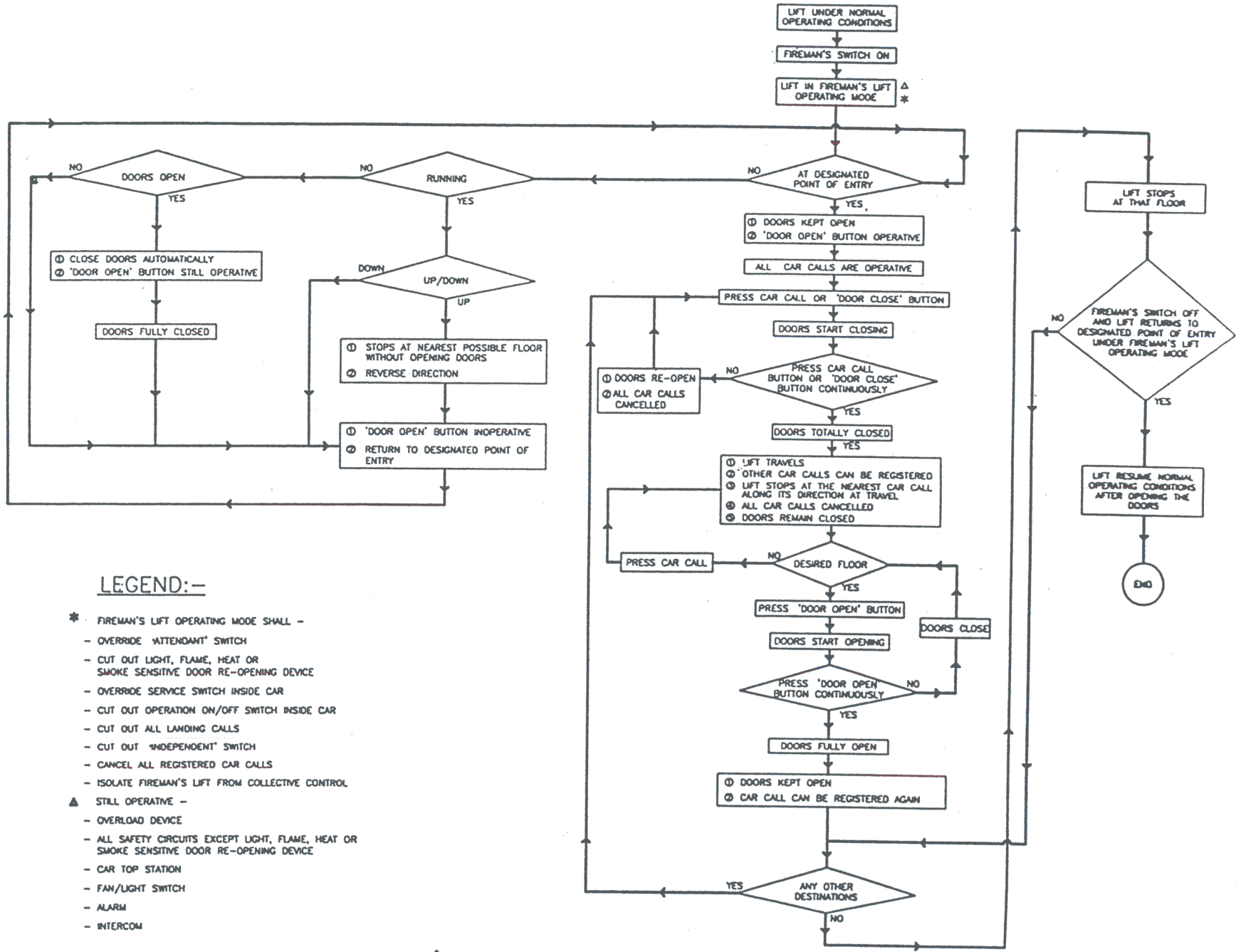
2.6 Position Indicator on Landing

Position indicator displaying the position of the lift car shall be provided to the fireman's lift on the landing at the designated point of entry and shall remain operative under the fireman's lift operating mode.

ANNEX I – FIREMAN'S SWITCH FOR FIREMAN'S LIFT



ANNEX II – FLOW CHART F1



LEGEND:–

* FIREMAN'S LIFT OPERATING MODE SHALL –

- OVERRIDE 'ATTENDANT' SWITCH
- CUT OUT LIGHT, FLAME, HEAT OR SMOKE SENSITIVE DOOR RE-OPENING DEVICE
- OVERRIDE SERVICE SWITCH INSIDE CAR
- CUT OUT OPERATION ON/OFF SWITCH INSIDE CAR
- CUT OUT ALL LANDING CALLS
- CUT OUT 'INDEPENDENT' SWITCH
- CANCEL ALL REGISTERED CAR CALLS
- ISOLATE FIREMAN'S LIFT FROM COLLECTIVE CONTROL

△ STILL OPERATIVE –

- OVERLOAD DEVICE
- ALL SAFETY CIRCUITS EXCEPT LIGHT, FLAME, HEAT OR SMOKE SENSITIVE DOOR RE-OPENING DEVICE
- CAR TOP STATION
- FAN/LIGHT SWITCH
- ALARM
- INTERCOM

FIREMAN'S LIFT OPERATION FLOW CHART