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2 February 1998

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

Dear Sirs,

Circular No. 3/98
Code of Practice on the Examination, Testing and Maintenance of Lifts and Escalators (1996 Edition)
Amendment No. 2

Pursuant to section 27G of the Lifts & Escalators (Safety) Ordinance (Cap. 327), the Code of Practice on the Examination, Testing and Maintenance of Lifts & Escalators (1996 Edition)(the Code) has been amended by revising the test report formats and making necessary corrections.

The above changes have been included in the Amendment No. 2 of the Code which is attached for your retention.

The requirements in the Amendment No. 2 of the Code shall come into operation on 15 February 1998 and shall be applicable to lift and escalator works carried out on or after that date.

Yours faithfully,

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

c.c. AD/BS
D of Housing (Attn.: TS/3)
WLC/GMWC/LYW/tlp

Code of Practice
on the Examination, Testing and Maintenance of
Lifts and Escalators
(1996 Edition)

AMENDMENT No. 2
Revised Appendices & Correction

(Effective as from 15 February 1998 and applicable to lift and escalator works carried out on or after that date)

Item	Clause	Description
1	Section C Clause 4.5.1(o)	Add ", car ventilation" after ".…….; car lighting".
2	Appendices	Repeal Appendix A, Appendix B, Appendix C & Appendix D and substitute the attached.

[Note: The amendments/corrections are to -

Appendix A

(i) include the examination/testing of door re-opening device for lift for person with a disability *(Amended Item 4.4(e))*;

(ii) add "6. Overspeed Governor Tests
6.1 Car Governor" *(Amended Item 6)*;

(iii) include the examination/testing of emergency stopping distance *(Amended Item 11)*;

(iv) include the examination/testing of various emergency alarm devices and CCTV *(Amended Item 13(f) & 14(i))*;

(v) replace "*Delete whichever applicable" on Page 4 by "*Delete whichever not applicable".

Appendix B

(i) include the examination/testing of door re-opening device for lift for person with a disability *(Amended Item 4.4(e))*;

(ii) add "Note 1 - The pressure readings should be taken between the check valve, or down direction valve, and the supply line to the cylinder." *(Amended Item 5(e))*;

(iii) include the examination/testing of various emergency alarm devices and CCTV *(Amended Item 12(f) & 13(i))*;

(iv) replace "*Delete whichever applicable" on Page 4 by "*Delete whichever not applicable".

Appendix C

(i) include the examination/testing of adjacent building obstacles and criss-cross escalators *(Amended Item 10(1)(b))*.

Appendix D

(i) replace "*Delete whichever applicable" on Page 2 by "*Delete whichever

not applicable".]

Appendix A Certification of Test and Examination for Electric Passenger Lifts/Freight Lifts/Non-commercial Vehicle Lifts

CERTIFICATION OF TEST AND EXAMINATION FOR ELECTRIC PASSENGER LIFTS*/FREIGHT LIFTS*/NON-COMMERCIAL VEHICLE LIFTS*

Description of Installation

Location : _____

Manufacturer : _____ Plant No. : _____

Lift Identification No. : _____ Length of Travel _____ m

Levels Served _____

Rated Load _____ kg _____ Persons Rated Speed _____ m/s

Power Supply at Time of Test _____ Volt _____ Phase _____ Hz

Levelling tolerance ± _____ mm Number of Starts _____ / hr

Car Floor Area _____ m^2

Machine Room Location : above lift well*/below lift well*/at side*/Others _____

Is this a fireman lift? Yes ☐ No ☐

Is this lift for disabled persons? Yes ☐ No ☐

2. Static Examination - Mechanical

2.1 Suspension

(a) Suspension Ropes

Certification No. & Date of Issue _____

(i) Number (ii) Nominal Diameter _____ mm

(b) Type of Anchorages : Car _____

Counterweight _____

Have the anchorages been examined and found in good working condition ? Yes ☐ No ☐

2.2 Safety Gear

Has the safety gear been certified in accordance with 5.11.1 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

Certification No. & Date of Issue _____

2.3 Energy Dissipation Buffers N.A.*/Fitted*

(a) Have the buffers been certified in accordance with 6.2.1 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

(b) Certification No. & Date of Issue _____

(c) Is the buffer switch functioning properly? Yes ☐ No ☐

2.4 Energy Accumulation Buffers N.A.*/Fitted*

(a) Have the buffers been certified in accordance with 6.2.1 of COP on the design & construction, Part 1? N.A.☐ Yes ☐ No ☐

(b) Certification No. & Date of Issue _____

(c) Do the buffers comply with 6.2.2 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

2.5 Brake

Does the brake sustain the static car, in the lower part of its travel, with the rated load plus 25% (passenger/general freight lifts) or 50% (non-commercial vehicle lifts/industrial truck loaded freight lifts)? Yes ☐ No ☐

2.6 Overspeed Governor

(a) Has the governor been certified in accordance with 5.12.1 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

(b) Certification No. & Date of Issue _____

(c) Is the data plate in accordance with 11.6 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

(d) Does the governor rope conform to 5.12.6 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

(e) Is the governor rope slack switch working properly? Yes ☐ No ☐

3. Static Examination - Electrical

3.1 Insulation Resistance to Earth

(a) Lift Motor _____ MΩ

(b) MG Set (if fitted) : Motor _____ MΩ Generator _____ MΩ

(c) Power System _____ MΩ (d) Safety Circuits _____ MΩ

3.2 Earthing

(a) Is the maximum continuity resistance to earth less than 0.5Ω? Yes ☐ No ☐

(b) Is the car connected to controller earthing terminal by a separate conductor≥0.75mm^2? Yes ☐ No ☐

3.3 Protection of Conductors

Is the fixed wiring in conduit or trunking (or fittings which ensure equivalent protection) throughout? Yes ☐ No ☐

3.4 Phase Failure Device

Does the phase reversal and phase failure device operate correctly? Yes ☐ No ☐

*Delete whichever not applicable.

4. Dynamic Tests

4.1 Safety Contacts/Circuits

(a) Have the contacts at each landing entrance been proved to ensure that when broken there is no movement of the car? Yes ☐ No ☐

(b) Have the mechanical locks at each landing entrance been proved for positive locking? Yes ☐ No ☐

(c) Have the car door/gate contacts been proved so that when broken there is no car movement? Yes ☐ No ☐

(d) If separate terminal stopping switches are fitted, do they operate satisfactorily? N.A. ☐ Yes ☐ No ☐

(e) Do the final limit switches remove the motor supply before the car or counterweight contact the buffers? Yes ☐ No ☐

(f) Have the stopping devices on the car top, in the pulley room and pit, been proved so that when broken no movement of the car occurs? Yes ☐ No ☐

(g) Have all other switches/contacts in the safety circuit been proved so that when broken no car movement occurs? Yes ☐ No ☐

(h) Does the earthing of the most remote contact (lock or push button) operate a fuse or trip a breaker without delay? Yes ☐ No ☐

(i) Are all other electromechanical interlocks working properly? Yes ☐ No ☐

4.2 Car Top Control Station

(a) Speed Up _____ m/s (b) Speed Down _____ m/s

(c) Does the design and operation of the car top station comply with 10.3.1.3 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

4.3 Clearances and Runbys

(a) With the counterweight on its fully compressed buffers, how much further can the lift car move upwards before it hits any obstruction? _____ mm

(b) What is the distance between the car roof and the lowest parts of roof of the lift well, when the car levels with top floor? _____ mm

(c) With the car resting on its fully compressed buffers, is there a sufficient space to accommodate a rectangular block as specified in 1.5.3(a) of COP on The Design & Construction, Part 1 with at least 0.5m between the bottom of the pit and the lowest point of the car? Yes ☐ No ☐

(d) Distance of bottom runby of car _____ mm

(e) Distance of bottom runby of counterweight _____ mm

4.4 Door Tests

(a) Type of sliding doors Horizontal*/Vertical*/collapsible*

(b) Form of operation of doors Manual*/Powered*

(c) Power supply to door control circuit _____ V

(d) Maximum force at the mid-point of the travel _____ N

(e) Does the construction & operation of the door re-opening device comply with 3.5.2.2 & 4.6.2.2*/3.5.2.3 & 4.6.2.3* of COP on The Design & Construction, Part 1? N.A. ☐ Yes ☐ No ☐

(f) Do the car doors fulfil the requirements of 4.10 of COP on The Design & Construction, Part 1? Yes ☐ No ☐

5. Measurements of the Electrical System

(a) Particulars of Lift Motor (as stated in data plate)

Maker _____ Drive System _____ _____

Serial No. _____ Speed _____ rpm Frequency _____ Hz

Power rating __ kw Rated Voltage _____ V Current Rating ___ ___ A

(b) Particulars of MG Set Drive Motor*/Convertor* (as stated in data plate)

Maker _____ Serial No. _____

Power Rating _____ KVA Voltage _____ V

Current Rating _____ A Speed _____ rpm Frequency _____ Hz

(Note : Speed and frequency not applicable for converter)

(c) Current and Speed Tests (at mid-point of travel)

	Lift Motor Speed	Lift Speed	Lift Motor Input		System Input MG Set*/ Convertor*	
No Load Down	rpm	m/s	V	A	V	A
Full Load Up	rpm	m/s	V	A	V	A

(d) Overcurrent protection devices

	Lift Motor	MG Set Drive Motor	Convertor
Type			
Settings			

* Delete whichever not applicable

CERTIFICATION OF TEST AND EXAMINATION FOR ELECTRIC PASSENGER LIFTS*/FREIGHT LIFTS*/NON-COMMERCIAL VEHICLE LIFTS*

6. Overspeed Governor Tests

6. Car Governor
Governor Type _____ Serial No. _____

		Electrical	Mechanical
Device Tripping Speed	Marked	m/s	m/s
	Measured	m/s	m/s

State how the governor was tested on the installation
Simulation*/Free Fall*/Actual Overspeed*/Others* _____

6.2 Counterweight Governor (if fitted)
Governor Type _____ Serial No. _____

		Electrical	Mechanical
Device Tripping Speed	Marked	m/s	m/s
	Measured	m/s	m/s

State how the governor was tested on the installation :
Simulation*/Free Fall*/Actual Overspeed*/Others* _____

7. Car Safety Gear Tests
Note : The following tests should be conducted with the car descending, with the brake open and the machine continuing to run till the ropes slip or become slack.

(a) Progressive Type N.A.*/Fitted*
(i) Does the safety gear operate correctly when engaging at rated speed with the rated load uniformly distributed in the lift car? N.A.☐ Yes ☐ No ☐
OR
(ii) Does the safety gear operate correctly when engaging at levelling or inspection speed with 125%* /150%* of the rated load uniformly distributed in the lift car? N.A. ☐ Yes ☐ No ☐
State the speed _____ m/s

(b) Instantaneous Type N.A.*/Fitted*
Does the safety gear operate correctly when engaging at rated speed with the rated load uniformly distributed? Yes ☐ No ☐

(c) What was the stopping distance in the test? _____ mm

(d) After the lift car was brought to a halt in the above test was the floor horizontal, or sloping less than 5% from the horizontal? Yes ☐ No ☐

8. Counterweight Safety Gear Tests
Note : The following tests should be conducted with the counterweight descending, with the brake open and the machine continuing to run till the ropes slip or become slack.

(a) Progressive Type N.A.*/Fitted*
(i) Does the safety gear operate correctly when engaging at rated speed with the car empty? N.A. ☐ Yes ☐ No ☐
OR
(ii) Does the safety gear operate correctly when engaging at levelling or inspection speed with the car empty? N.A. ☐ Yes ☐ No ☐

(b) Instantaneous Type N.A.*/Fitted*
Does the safety gear operate correctly when engaging at rated speed with the car empty? Yes ☐ No ☐

9. Buffer Tests
(a) For Car Buffers
(i) When the car was brought into contact with the buffers at rated load at rated speed, or at a speed for which the stroke of the buffers has been calculated, was the operation satisfactory? Yes ☐ No ☐
(ii) Do the buffers recover automatically after operation? Yes ☐ No ☐

(b) For Counterweight Buffers
When the counterweight was brought into contact with the buffers with the car empty at rated speed, or a speed for which the stroke of the buffers has been calculated, was the operation satisfactory? Yes ☐ No ☐

10. Traction Checks

(a) Does the car stop under emergency conditions
(i) with the car empty when travelling upwards at rated speed? Yes ☐ No ☐

*Delete whichever not applicable

(ii) with the rated load plus 25% when travelling downwards in the lower part of the lift well at rated speed? Yes ☐ No ☐

(b) With the counterweight resting on its fully compressed buffers, is it impossible for the empty car to be raised under power? Yes ☐ No ☐

Emergency Stopping Distance
What was the stopping distance of the car travelling in down direction at rated speed and carrying 125% of the rated load under emergency stopping conditions? m

12. Duty Cycle Test
Does the lift operate satisfactorily for a period of at least 0.5 hour when running with rated load, full travel and intermediate stops at a rate of starts equal to the number of starts per hour recommended in Item 1? Yes ☐ No ☐

13. General (Lift Work)
(a) Is the maximum load indicated in the car and does it comply with 11.2.1 of COP on The Design & Construction, Part 1? Yes ☐ No ☐
(b) Does the fireman lift operation function correctly? N.A. ☐ Yes ☐ No ☐
(c) Are the emergency instructions displayed in the machine room? Yes ☐ No ☐
(d) Does the emergency operation system function correctly in accordance with 8.5 of COP on The Design & Construction, Part 1? Yes ☐ No ☐
(e) Does the emergency lighting of the car comply with 4.16.3 of COP on The Design & Construction, Part 1? Yes ☐ No ☐
(f) What are the emergency alarm devices?

	Mangt office	M/C room	Lift car	Main lobby/Pit
Alarm bell*	☐	☐	☐	☐
Intercom*	☐	☐	☐	
Indication light*	☐	☐		
Indication light for acknowledgement & the notice*			☐	

(g) Does the overload device operate satisfactorily? Yes ☐ No ☐

14. General (Other works)
(a) Is the machine room artificial lighting adequate for maintenance purposes? Yes ☐ No ☐
(b) Does the artificial lighting in the lift well comply with 1.7(b) of COP on The Design & Construction, Part 1? Yes ☐ No ☐
(c) Are the machine room conditions satisfactory? Yes ☐ No ☐
(d) Are the provisions for ventilating the machine room adequate? Yes ☐ No ☐
(e) Are the machine room doors or trap doors fitted with a suitable lock to comply with 3.15.3 and 3.15.4 of COP on Building Works for Lifts and Escalators? Yes ☐ No ☐
(f) Are the safety means of access to all items of equipment in accordance with COP on The Design & Construction, Part 1 and COP on Building Works for Lifts and Escalators? Yes ☐ No ☐
If no, state details _____
(g) Are the hoistway emergency doors (if fitted), in compliance with 3.2 of COP on Building Works for Lifts and Escalators? N.A. ☐ Yes ☐ No ☐
(h) Documents (copy only) in respect of exemptions (if any) shall be provided for reference. N.A. ☐ Yes ☐ No ☐
(i) Are CCTV camera provided in lift car and CCTV monitors provided in management office *and machine room *? N.A. ☐ Yes ☐ No ☐

15. Declaration

I certify that on _____ the equipment was thoroughly examined and found to be free from obvious defects, and to comply with the COP on The Design & Construction, Part 1, COP on Examination, Testing and Maintenance of Lifts and Escalators and COP on Building Works for Lifts and Escalators with the exception of the following items and that the foregoing is an accurate record of the test and examination carried out.

Exceptions

_____ _____
Name & Registration No. of Registered Lift Engineer | Signature of Registered Lift Engineer

_____ _____
Name of Registered Lift Contractor | Date

Remarks : COP means Code of Practice
* Delete whichever not applicable

Appendix B Certification of Test and Examination for Hydraulic Passenger Lifts/Freight Lifts/Non-commercial Vehicle Lifts

CERTIFICATION OF TEST AND EXAMINATION FOR HYDRAULIC PASSENGER LIFTS*/FREIGHT LIFTS*/NON-COMMERCIAL VEHICLE LIFT*

Description of Installation
Location : _____
Manufacturer : _____ Plant No.: _____
Lift Identification No. : _____ Length of Travel _____ m
Levels Served _____
Rated Load _____ kg _____ Persons Rated Speed Up _____ m/s
Dia. of Ram _____ m Ram Action : Direct*/Indirect* Type of Ram : Single*/Telescopic*
Power Supply at Time of Test _____ Volt _____ Phase _____ Hz
Levelling tolerance ± _____ mm Number of Starts _____ /hr
Car Floor Area _____ m^2
Machine Room Location : above lift well*/below lift well*/at side*/others
Is this a fireman lift? Yes ☐ No ☐
Is the lift for disabled persons? Yes ☐ No ☐
Devices provided against free fall and descent with excessive speed of the car:-
(i) Safety gear tripped by overspeed governor Yes ☐ No ☐
(ii) Safety gear tripped by failure of suspension gear or by safety rope Yes ☐ No ☐
(iii) Rupture value Yes ☐ No ☐
(iv) Restrictor Yes ☐ No ☐
Devices/system provided against creeping of the car:-
(i) Safety gear tripped by downward movement of the car Yes ☐ No ☐
(ii) Pawl device Yes ☐ No ☐
(iii) Clamping device Yes ☐ No ☐
(iv) Electrical anti-creep system Yes ☐ No ☐

2. Static Examination - Mechanical
2.1 Jack
Single Jack ☐ Multi Jack ☐ Number of Jacks _____
In multi jack system, are the jacks, in compliance with 8.1.3 of COP on The Design & Construction,Part 2? Yes ☐ No ☐ N.A.☐
2.2 Suspension
(a) Suspension Ropes
(i) Certification No. & Date of Issue _____
(ii) Number _____ Nominal Diameter _____ mm
(b) Type of Anchorage : Car _____
Counterweight (if provided) _____
Have the anchorages been examined and found in good working condition? Yes ☐ No ☐
2.3 Suspension Chains N.A.*/Fitted*
(a) Number ____ (b) Pitch ____mm (c) Type and Construction _____
2.4 Safety Gear N.A.*/Fitted*
Has the safety gear been certified in accordance with 5.10.1.5 of COP on The Design & Construction, Part 2? Yes ☐ No ☐
Certification No. & Date of Issue : _____
2.5 Energy Dissipation Buffers N.A.*/Fitted*
(a) Have the buffers been certified in accordance with F5 of BS5655, Part 2 Yes ☐ No ☐
(b) Certification No. & Date of Issue : _____
(c) Is the buffer switch functioning properly? Yes ☐ No ☐
2.6 Energy Accumulation Buffers N.A.*/Fitted*
(a) Have the buffers been certified in accordance with F5 of BS5655 Part 2 N.A. ☐ Yes ☐ No ☐
(b) Do the buffers comply with 6.2.3 of COP on The Design & Construction, Part 2? Yes ☐ No ☐
2.7 Overspeed Governor N.A.*/Fitted*
(a) Has the governor been certified in accordance with F.4.3 of BS5655 Part 2? Yes ☐ No ☐
(b) Certification No. & Date of Issue : _____
(c) Is the data plate in accordance with 11.6 of COP on The Design & Construction, Part 2? Yes ☐ No ☐
(d) Does the governor rope conform to 5.12.6 of COP on The Design & Construction, Part 2? Yes ☐ No ☐
(e) Is the governor slack rope switch working properly? Yes ☐ No ☐

3. Static Examination - Electrical
3.1 Insulation Resistance to Earth
(a) Pump Motor ____ MΩ (b) Power System ____ MΩ (c) Safety Circuits MΩ
3.2 Earthing
(a) Is the maximum continuity resistance to earth less than 0.5Ω? Yes ☐ No ☐
(b) Is the car connected to controller earthing terminal by a separate conductor ≥ $0.75mm^2$? Yes ☐ No ☐
3.3 Protection of Conductors
Is the fixed wiring in conduit or trunking (or fittings which ensure equivalent protection) throughout? Yes ☐ No ☐

* Delete whichever not applicable

3.4 Phase Failure Device
Does the phase reversal and phase failure device operate correctly? Yes ☐ No ☐

4. Dynamic Tests

4.1 Safety Contacts/Circuits

(a) Have the contacts at each landing entrance been proved to ensure that when broken there is no movement of the car? Yes ☐ No ☐

(b) Have the mechanical locks at each landing entrance been proved for positive locking? Yes ☐ No ☐

(c) Have the car door/gate contacts been proved so that when broken there is no car movement? Yes ☐ No ☐

(d) If separate terminal stopping switches are fitted, do they operate satisfactorily? N.A. ☐ Yes ☐ No ☐

(e) Does the final limit switch operate in accordance with 6.3 of COP on The Design & Construction, Part 2? Yes ☐ No ☐

(f) Have the stopping devices on the car top, in the pulley room and pit been proved so that when broken no movement of the car occurs? Yes ☐ No ☐

(g) Have all other switches/contacts in the safety circuit been proved so that when broken no car movement occurs? Yes ☐ No ☐

(h) Does the earthing of the most remote contact (lock or push button) operate a fuse or trip a breaker without delay? Yes ☐ No ☐

(i) Are all other electromechanical interlocks working properly? Yes ☐ No ☐

4.2 Car Top Control Station

(a) Speed Up _____ m/s (b) Speed Down _____ m/s

(c) Does the design and operation of the car top station comply with 10.3.1.3 of COP on The Design & Construction, Part 2? Yes ☐ No ☐

4.3 Clearances and Runbys

(a) Will the car and counterweight (if fitted) clear all obstacles when driven at slow speed:

(i) with the car and rated load compressing the car buffers? Yes ☐ No ☐

(ii) with the counterweight (if fitted) compressing its buffer (car empty)? N.A. ☐ Yes ☐ No ☐

(iii) with the ram fully extended to the ram stop? Yes ☐ No ☐

(b) What is the distance between the car roof and the lowest parts of roof of the lift well, when the car levels with top floor? _____ mm

(c) With the car resting on its fully compressed buffers, is there a sufficient space to accommodate the rectangular block as specified in 1.5.2(a) of COP on The Design & Construction, Part 2 with at least 0.5m between the bottom of the pit and the lowest point of the car? Yes ☐ No ☐

(d) Distance of bottom runby of car _____ mm

(e) Distance of bottom runby of counterweight (if fitted) _____ mm

4.4 Door Tests

(a) Type of sliding doors Horizontal*/Vertical*/collapsible*

(b) Form of operation of doors Manual*/Powered*

(c) Power supply to door control circuit _____ V

(d) Maximum force at the mid-point of the travel _____ N

(e) Does the construction & operation of the door re-opening device comply with 3.5.2.2 & 4.6.2.2*/3.5.2.3 & 4.6.2.3* of COP on The Design & Construction, Part 2? N.A. ☐ Yes ☐ No ☐

(f) Do the car doors fulfil the requirements of 4.10 of COP on The Design & Construction, Part 2? Yes ☐ No ☐

5. Measurements of the Hydraulic and Electrical System

Note : 1 bar = $10^5 N/m^2 = 10^5 Pa$

(a) With rated load in the car and highest floor level, state static hydraulic pressure _____ bar

(b) When subject to 200% of full load pressure applied between the non-return valve and the jack (included) for a period of 5 minutes, is there evidence of any pressure drop or leakage of hydraulic fluid? Yes ☐ No ☐

(c) Particulars of the pump motor (as stated on data plate)
Maker _____ Drive System _____
Serial No. _____ Speed _____ r/min Frequency _____ Hz
Power Rating _____ kW Rated Voltage _____ V Current Rating _____ A

(d) Particulars of the pump (as stated on data plate)
Maker _____ Serial No. _____ Type _____

(e) Current and Speed Tests (at mid-point of travel)

	Hydraulic pressure (See Note 1)	Lift Speed	Motor Input (See Note 2)	
No Load Up	bar	m/s	V	A
Rated Load Up	bar	m/s	V	A

*Delete whichever not applicable

Note 1 - The pressure readings should be taken between the check valve, or down direction valve, and the supply line to the cylinder.
Note 2 - The motor current readings on conductors adjacent to the motor terminal block should be taken with the motor running steadily.

(f) Pressure relief valve operated at pressure of _____ bar and was the integrity of the pipework satisfactory? Yes ☐ No ☐

(g) Is the relief valve secured against any unauthorized interference? Yes ☐ No ☐

(h) Does the check valve hold the car with rated load at floor level? Yes ☐ No ☐

(i) Does the rupture valve function correctly? N.A.☐ Yes ☐ No ☐

(j) Does the operation of the manual lowering valve lower the car at a slow speed not exceeding 0.3m/s? Yes ☐ No ☐

(k) In the case of an indirect acting lift, does the slack chain*/ropes* switch or pressure switch prevent operation of the lift until pressure is re-established by the re-setting of the switch? N.A.☐ Yes ☐ No ☐

(l) Are precautions against any overheating of the fluid provided? Yes ☐ No ☐

6. Overspeed Governor/Safety Rope/Suspension Gear Tests

(a) Governor N.A.*/Fitted*

Type _____ Serial No. _____

		Electrical	Mechanical
Device Tripping Speed	Marked	m/s	m/s
	Measured	m/s	m/s

State how the governor was tested on the installation:
Simulation*/Free Fall*/Actual Overspeed*/Others* _____

OR

(b) Safety Rope
If the safety gear*/clamping device* is tripped by a safety rope, does the triggering mechanism operate satisfactory? N.A.☐ Yes ☐ No ☐

(c) Suspension Gear
If the safety gear*/clamping device* is tripped by the failure of suspension gear, does the triggering mechanism operate satisfactorily? N.A.☐ Yes ☐ No ☐

7. Car Safety Gear Tests N.A.*/Fitted*

Note : The following tests should be conducted with the car descending.

(a) Progressive Type
Does the safety gear operate correctly if engaged at levelling*/ inspection*/rated* speed with 100%*/125%*/150%* of the rated load uniformly distributed in the lift car. Yes ☐ No ☐
State the speed : _____ m/s

OR

(b) Yes ☐ No ☐
mm

Yes ☐ No ☐

8. Clamping Device Tests N.A.*/Fitted*

(a) Progressive Type
Does the clamping device operate correctly when engaging with 125%*/ 150%* of the rated load uniformly distributed in the lift car? Yes ☐ No ☐

(b) Instantaneous Type
Does the clamping device operate correctly when engaging with 125%*/150%* of the rated load uniformly distributed in the car? Yes ☐ No ☐

9. Buffer Tests

(a) For Car Buffers

(1) When the car was brought into contact with the buffers at rated load and at rated speed, or at a speed for which the stroke of the buffers has been calculated, was the operation satisfactory? Yes ☐ No ☐

(2) Do the buffers automatically return to their designed position after undergoing compression? Yes ☐ No ☐

(b) For Counterweight Buffers (if fitted)
When the counterweight was brought into contact with the buffers with the car empty and travelling at rated speed, or a speed for which the stroke of the buffers has been calculated, was the operation satisfactory? N.A.☐ Yes ☐ No ☐

* Delete whichever not applicable

10. Anti-Creep
Does the anti-creep device operate in accordance with conditions stipulated in 10.3.1.4 of COP on The Design & Construction Part 2? Yes ☐ No ☐

11. Duty Cycle Test
Does the lift operate satisfactory for a period of at least 0.5 hour when running with rated load over the full travel distance and serving intermediate stops at a rate equal to the number of starts per hour as stated in Item 1? Yes ☐ No ☐

12. General (Lift Work)
(a) Is the maximum load indicated in the car and does it comply with 11.2.1 of COP on The Design & Construction, Part 2 ? Yes ☐ No ☐
(b) Does the fireman lift operation function correctly? N.A. ☐ Yes ☐ No ☐
(c) Are the emergency instructions displayed in the machine room? Yes ☐ No ☐
(d) Does the manual emergency operation system function correctly in accordance with 8.9 of COP on The Design & Construction, Part 2? Yes ☐ No ☐
(e) Does the emergency lighting of the car comply with 4.16.3 of COP on The Design & Construction, Part 2? Yes ☐ No ☐
(f) What are the emergency alarm devices?

	Mangt office	M/C room	Lift car	Main lobby/Pit
Alarm bell*	☐	☐	☐	☐
Intercom*	☐	☐	☐	
Indication light*	☐	☐		
Indication light for acknowledgement & the notice*			☐	

(g) Does the overload device operate satisfactorily? Yes ☐ No ☐

13. General (Other Works)
(a) Is the machine room artificial lighting adequate for maintenance purposes? Yes ☐ No ☐
(b) Does the artificial lighting in the lift well comply with 1.7(b) of COP on The Design & Construction, Part 2? Yes ☐ No ☐
(c) Are the machine room conditions satisfactory? Yes ☐ No ☐
(d) Are the provisions for ventilation of the machine room adequate? Yes ☐ No ☐
(e) Are the machine room doors or trap doors fitted with a suitable lock to comply with 3.15.3 and 3.15.4 of COP on Building Works for Lifts and Escalators? Yes ☐ No ☐
(f) Are the safety means of access to all items of equipment in accordance with the COP for The Design & Construction, Part 2 and COP on Building Works on Lifts and Escalators? Yes ☐ No ☐
If no, state details _____
(g) Are the hoistway emergency door (if fitted), in compliance with 3.2 of COP of Building Works for Lifts and Escalators? N.A. ☐ Yes ☐ No ☐
(h) Documents (copy only) in respect of exemptions (if any) shall be provided for reference N.A. ☐ Yes ☐ No ☐
(i) Are CCTV camera provided in lift car and CCTV monitors provided in management office *and machine room *? N.A. ☐ Yes ☐ No ☐

14. Declaration

I certify that on _____ the equipment was thoroughly examined, found to be free from obvious defects, and to comply with the COP on The Design & Construction, Part 2, COP on Examination, Testing and Maintenance and COP on Building Works for Lifts and Escalators with the exception of the following items and that the foregoing is an accurate record of the test and examination carried out.

Exception

_____ _____
Name & Registration No. of Registered Lift Engineer | Signature of Registered Lift Engineer

_____ _____
Name of Registered Lift Contractor | Date

Remarks COP means Code of Practice

* Delete whichever not appliable

Appendix C Certification of Test and Examination for Escalators/Passenger Conveyors

CERTIFICATION OF TEST AND EXAMINATION FOR ESCALATORS/PASSENGER CONVEYORS

Description of Installation
Location : _____
Environment : Outdoor*/Indoor*
Manufacturer : _____ Plant No. :
Identification No. : _____ Model No. : _____
Angle of Inclination : _____ degree Rated Speed _____ m/s
Vertical Rise : _____ m Capacity : _____ Persons/Hour
Step Width : _____ mm Step Depth : _____ mm
No. of Exposed Steps between Combplates : _____ Step Height _____ mm
Distance between Handrail Centrelines : _____ mm
Horizontal Travel Distance of the Steps at the ends : _____ mm
Contract Power Supply : _____ Volt _____ Hz _____ Phase
Type of Balustrade : Opaque*/Tempered Glass*/Others* _____
Machinery Location : Inside Truss*/Outside Truss*
Is yellow band provided on side edges*/leading*/trailing* edge? Yes ☐ No ☐
Is sump pump provided at upper*/lower* station? Yes ☐ No ☐
Is remote monitoring facilities provided ? Yes ☐ No ☐

2. Static Examination
   (a) Are the combplates and terminal guides adjusted properly? Yes ☐ No ☐
   (b) Has the brake(s) been examined and found to be in order? Yes ☐ No ☐
   (c) Is an auxiliary brake provided? N.A.☐ Yes ☐ No ☐

3. Dynamic Tests
   (a) Has the operation brake been tested at no load*/full load* up*/down* condition? Yes ☐ No ☐

   AND

   The stopping distance is _____ mm

   Does the auxiliary brake operate properly? N.A.☐ Yes ☐ No ☐
   Does the overspeed device operate properly? N.A.☐ Yes ☐ No ☐

* Delete whichever not applicable

4. Driving Motor Current Tests
   Driving Motor Manufacturer _____ Serial Number :
   Voltage at Time of Test : _____ Rated Power : _
   Form of Overload Protection

   ☐ 3-Phase circuit breaker
   ☐ Overloads in each phase
   ☐ Others _____

	Running Current (A)	
	Up	Down
No Load		

   Separate supply for machine compartment/power socket? Yes ☐ No ☐

5. Clearance
   (a) Is the clearance between consecutive steps not exceeding 6mm? Yes ☐ No ☐
   (b) Is the clearance between step and adjacent skirting not exceeding 4mm? Yes ☐ No ☐
   (c) Is the total clearance between step and both skirting not exceeding 7mm? Yes ☐ No ☐
   (d) Is the clearance between the upper surface of the step and the root of the comb teeth not exceeding 4mm? Yes ☐ No ☐
   (e) Is the distance between the floor and the lower point of the handrail into the newel within the range of 0.1m to 0.25m? Yes ☐ No ☐

6. Insulation Resistance to Earth
   Power System : _____ MΩ Safety Circuit : _____ MΩ

   Earthing
   (a) Is all metalwork enclosing conductors bonded to earth? Yes ☐ No ☐
   (b) Is the maximum continuity resistance to earth less than 0.5Ω? Yes ☐ No ☐

Delete whichever not applicable

8. Half Hour Run
The escalator*/passenger conveyor* is to run unladen, fifteen minutes in the up*/forward* direction followed by fifteen minutes in the down*/backward* direction. Yes ☐ No ☐
Observations : _____

9. General (Escalator*/Passenger Conveyor* Work)
Have the following items where fitted been checked for correct operation?

(a)	Emergency Stop Switches		Yes ☐ No ☐
(b)	Broken Step Chain Device		Yes ☐ No ☐
(c)	Broken Drive Chain*/Belt* Device		Yes ☐ No ☐
(d)	Handrail Inlet Switch		Yes ☐ No ☐
(e)	Non-reversal Device		Yes ☐ No ☐
(f)	Combplate Switch		Yes ☐ No ☐
(g)	Operation Brake		Yes ☐ No ☐
(h)	Step Sagging Device		Yes ☐ No ☐
(i)	Skirt Panel Switch		Yes ☐ No ☐
(j)	Phase Protection Device		Yes ☐ No ☐
(k)	Overspeed Device	N.A.☐	Yes ☐ No ☐
(l)	Broken Handrail Device	N.A.☐	Yes ☐ No ☐
(m)	Auxiliary Brake	N.A.☐	Yes ☐ No ☐

0. General (Other Works)
Have the following items been properly provided

(1)	(a) Notice/pictographs for Passengers.		Yes ☐ No ☐
	(b) Guard at adjacent building obstacles and criss-cross escalators	N.A.☐	Yes ☐ No ☐
	(c) Rigid guard adjacent to escalator handrail.	N.A.☐	Yes ☐ No ☐
	(d) Notice on access door to machinery spaces?	N.A.☐	Yes ☐ No ☐
(2)	Do the unrestricted landing areas comply with 1.2.1.1 of COP on The Design & Construction, Part 4?		Yes ☐ No ☐
(3)	Does the clear height above step*/belt* comply with 1.2.2 of COP on The Design & Construction, Part 4?		Yes ☐ No ☐

Exemptions (if any)

12. Declaration

I certify that on _____ the equipment was thoroughly examined and found to be free from obvious defects, and to comply with the COP on The Design & Construction, Part 4, COP on Examination, Testing and Maintenance of Lifts and Escalators and COP on Building Works for Lifts and Escalators with the exception of the following items and that the foregoing is an accurate record of the test and examination carried out.

Exceptions

_____	_____
Name & Registration No. of Registered Escalator Engineer	Signature of Registered Escalator Engineer
_____	_____
Name of Registered Escalator Contractor	Date

* Delete whichever not applicable.

Appendix D Certification of Test and Examination for Electric Service Lifts

CERTIFICATION OF TEST AND EXAMINATION FOR ELECTRIC SERVICE LIFT

Description of Installation
Location _____
Manufacturer ____ Plant No. _____
Lift Identification No. Length of Travel _____ m
Levels Served _____
Rated Load _____ kg Rated Speed _____ m/s
Power Supply at Time of Test _____ Volt _____ Phase _____ Hz
Machine Room Location : above lift well*/below lift well*/at side*
Car Floor Area _____ m^2 Car internal height _____ m

2. Examinations and Tests

2.1 Suspension

(a) Suspension Ropes
(i) Number _____ (ii) Nominal Diameter _____ mm

(b) Type of Anchorages : Car _____ Counterweight _____

Have the anchorages been examined and found in good working condition? Yes ☐ No ☐

2.2 Car Safety Gear Tests N.A.*/Fitted*

Note : The following test should be conducted with the car descending.

(a) Progressive Type
Does the safety gear operate correctly if engaged at inspection*/rated* speed with 100%*/125%* of the rated load uniformly distributed in the lift car? N.A.☐ Yes ☐ No ☐
State the speed : _____ m/s

(b) Instantaneous Type
Does the safety gear operate correctly if engaged at rated speed with rated load uniformly distributed in the lift car? N.A.☐ Yes ☐ No ☐

(c) What was the stopping distance in the test? _____ mm

2.3 Counterweight Safety Gear Tests N.A.*/Fitted*

Note : The following test should be conducted with the counterweight descending.

(a) Progressive Type
Does the safety gear operate correctly if engaged at inspection*/rated* speed with the lift car empty? Yes ☐ No ☐

(b) Instantaneous Type
Does the safety gear operate correctly if engaged at rated speed with lift car empty? Yes ☐ No ☐
(Delete either (a) or (b) or both)

2.4 Overspeed Governor*/Safety Rope*/Suspension Failure Device* Test

(a) Car N.A.*/Fitted*

(i) Governor
Type _____ Serial No. _____

Device	Tripping Speed (m/s)	
	Marked	Measured
Electrical		
Mechanical		

State how the governor was tested on the installation
Simulation*/Free Fall*/Actual Overspeed*/Others*

OR

(ii) Safety Rope*/Suspension Failure Device*
Does the triggering mechanism operate correctly? Yes ☐ No ☐

(b) Counterweight N.A.*/Fitted*

(i) Governor
Type _____ Serial No. _____

Device	Tripping Speed (m/s)	
	Marked	Measured
Electrical		
Mechanical		

State how the governor was tested on the installation :
Simulation*/Free Fall*/Actual Overspeed*/Others* _

(ii) Safety Rope*/Suspension Failure Device*
Does the triggering mechanism operate correctly? Yes ☐ No ☐

2.5 Brake
Is the brake capable of stopping the machine when the lift is travelling at its rated speed with the rated load plus 25%? Yes ☐ No ☐

2.6 Buffer Tests

(a) Car Buffer
When the lift was brought into contact with the buffer with rated load at rated speed, was the operation satisfactory? Yes ☐ No ☐

* Delete whichever not applicable

(b) Counterweight Buffer
When the counterweight was brought into contact with the buffer with the car empty at rated speed, was the operation satisfactory? Yes ☐ No ☐

2.7 Insulation Resistance to Earth and Earthing
(a) Lift Motor _____ MΩ (b) Safety Circuit _____ MΩ
(c) Is the maximum continuity resistance to earth less than 0.5Ω? Yes ☐ No ☐

2.8 Safety Contacts/Circuits
(a) Have the contacts at each landing door been proved so that when broken there is no movement of the car? Yes ☐ No ☐
(b) Have the car door contacts been proved so that when broken there is no movement of the car? Yes ☐ No ☐
(c) Do the terminal stopping switches operate satisfactory? Yes ☐ No ☐
(d) Do the stopping device in machine room and in pit operate correctly Yes ☐ No ☐
(e) Does the earthing of the most remote contact (lock or push button) operate a fuse or trip a breaker? Yes ☐ No ☐

2.9 Current and Speed Tests (at mid-point of travel)

	Lift Motor Speed (rpm)	Lift Speed (m/s)	Motor Input	
			(V)	(A)
No Load Down				
Full Load Up				

2.10 Traction Checks
Does the car stop under emergency conditions
(a) with the car empty when travelling upwards in the upper part of the lift well at rated speed?
(b) with rated load plus 25% when travelling downwards in the lower part of the lift well at rated speed? Yes ☐ No ☐

3. General
(a) Are the maximum load and warning notice displayed at each landing in compliance with10.1 and 10.3.1 of COP on The Design & Construction, Part 3? Yes ☐ No ☐
(b) Are the emergency instructions displayed in the machine room? Yes ☐ No ☐
(c) Is the machine room lighting adequate for maintenance purpose? Yes ☐ No ☐
(d) Are the provisions for ventilating the machine room adequate? Yes ☐ No ☐
(e) Is each machine room door or trap door complied with the COP on Building Works for Lifts and Escalators? Yes ☐ No ☐
(f) Is the clear space in front of the controller not less than 900mm in depth? If no, state details in Item 4. Yes ☐ No ☐
(g) Is the access to machine room and to all equipment safe and convenient? Yes ☐ No ☐

4. Others

5. Declaration

I certify that on _____ the equipment was thoroughly examined and found to be free from obvious defects and to comply with the COP on The Design & Construction, Part 3, COP on Examination, Testing and Maintenance and COP on Building Works for Lifts and Escalators with the exception of the following items and that the foregoing is an accurate record of the test and examination carried out.

Exceptions

_____ _____
Signature of Registered Lift Engineer

_____ _____
Name of Registered Lift Contractor Date

Remarks : COP means Code of Practice

* Delete whichever not applicable