Dear Sirs,

Circular No. 3/98
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) 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)

<table>
<thead>
<tr>
<th>Item</th>
<th>Clause</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Section C Clause 4.5.1(o)</td>
<td>Add &quot;, car ventilation&quot; after &quot;…….; car lighting&quot;.</td>
</tr>
<tr>
<td>2</td>
<td>Appendices</td>
<td>Repeal Appendix A, Appendix B, Appendix C &amp; Appendix D and substitute the attached.</td>
</tr>
</tbody>
</table>

[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 __________ Persons __________ Rated Speed __________ m/s

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

Levelling tolerance + __________ mm __________ Number of Starts __________ / hr

Car Floor Area __________ m²

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) Is the buffer switch functioning properly? 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

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≥0.75mm²? 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 Runys
(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*/Converter* (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)

<table>
<thead>
<tr>
<th>Lift Motor Speed</th>
<th>Lift Speed</th>
<th>Lift Motor Input</th>
<th>System Input MG Set*/Converter*</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Load Down</td>
<td>rpm</td>
<td>m/s</td>
<td>V A</td>
</tr>
<tr>
<td>Full Load Up</td>
<td>rpm</td>
<td>m/s</td>
<td>V A</td>
</tr>
</tbody>
</table>

(d) Overcurrent protection devices

<table>
<thead>
<tr>
<th>Type</th>
<th>Lift Motor</th>
<th>MG Set Drive Motor</th>
<th>Converter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Delete whichever not applicable
6. Overspeed Governor Tests

6.1 Car Governor

<table>
<thead>
<tr>
<th>Device Tripping</th>
<th>Electrical</th>
<th>Mechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>m/s</td>
<td>m/s</td>
</tr>
</tbody>
</table>

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

6.2 Counterweight Governor (if fitted)

<table>
<thead>
<tr>
<th>Device Tripping</th>
<th>Electrical</th>
<th>Mechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>m/s</td>
<td>m/s</td>
</tr>
</tbody>
</table>

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
(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 □

(b) Instantaneous Type
Does the safety gear operate correctly when engaging at rated speed with the rated load uniformly distributed? N.A. □ 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
(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
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
CERTIFICATION OF TEST AND EXAMINATION FOR ELECTRIC PASSENGER LIFTS*/FREIGHT LIFTS*/NON-COMMERCIAL VEHICLE LIFTS*

(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?

<table>
<thead>
<tr>
<th>Device</th>
<th>Mangt Office</th>
<th>M/C Room</th>
<th>Lift Car</th>
<th>Main Lobby/Pit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm bell*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercom*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indication light*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indication light for acknowledgement &amp; the notice*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(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*

<table>
<thead>
<tr>
<th>Description of Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: __________________</td>
</tr>
<tr>
<td>Manufacturer: ______________</td>
</tr>
<tr>
<td>Lift Identification No.: __________</td>
</tr>
<tr>
<td>Length of Travel __________ m</td>
</tr>
<tr>
<td>Levels Served __________________</td>
</tr>
<tr>
<td>Rated Load _______ kg Persons _______ Rated Speed Up _______ m/s</td>
</tr>
<tr>
<td>Dia. of Ram _______ m Ram Action: Direct*/Indirect* Type of Ram: Single*/Telescopic*</td>
</tr>
<tr>
<td>Power Supply at Time of Test _______ Volt _______ Phase _______ Hz</td>
</tr>
<tr>
<td>Levelling tolerance + _______ mm Number of Starts /hr</td>
</tr>
<tr>
<td>Car Floor Area _______ m²</td>
</tr>
<tr>
<td>Machine Room Location: above lift well*/below lift well*/at side*/others</td>
</tr>
<tr>
<td>Is this a fireman lift? Yes ☐ No ☐</td>
</tr>
<tr>
<td>Is the lift for disabled persons? Yes ☐ No ☐</td>
</tr>
<tr>
<td>Devices provided against free fall and descent with excessive speed of the car:</td>
</tr>
<tr>
<td>(i) Safety gear tripped by overspeed governor Yes ☐ No ☐</td>
</tr>
<tr>
<td>(ii) Safety gear tripped by failure of suspension gear or by safety rope Yes ☐ No ☐</td>
</tr>
<tr>
<td>(iii) Rupture value Yes ☐ No ☐</td>
</tr>
<tr>
<td>(iv) Restrictor Yes ☐ No ☐</td>
</tr>
<tr>
<td>Devices/system provided against creeping of the car:</td>
</tr>
<tr>
<td>(i) Safety gear tripped by downward movement of the car Yes ☐ No ☐</td>
</tr>
<tr>
<td>(ii) Pawl device Yes ☐ No ☐</td>
</tr>
<tr>
<td>(iii) Clamping device Yes ☐ No ☐</td>
</tr>
<tr>
<td>(iv) Electrical anti-creep system Yes ☐ No ☐</td>
</tr>
</tbody>
</table>

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

| Number (b) Pitch _________nm (c) Type and Construction |

2.4 Safety Gear

| 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

| (a) Have the buffers been certified in accordance with F5 of BS565 Part 2? Yes ☐ No ☐ |
| (b) Certification No. & Date of Issue: __________________ |
| (c) Is the buffer switch functioning properly? Yes ☐ No ☐ |

2.6 Energy Accumulation Buffers

| (a) Have the buffers been certified in accordance with F5 of BS565 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

| (a) Has the governor been certified in accordance with F.4.3 of BS565 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 ≥ 0.75mm²? 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
Do 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* Yes □ No □
(b) Form of operation of doors Manual*/Powered* Yes □ No □
(c) Power supply to door control circuit ______ V Yes □ No □
(d) Maximum force at the mid-point of the travel ______ N Yes □ No □
(e) Does the construction & operation of the door re-opening device comply with 3.5.2.2 & 4.6.2.2* 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/m² = 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 □

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

(l) 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 0.3 m/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 resetting of the switch? N.A. □ Yes □ No □

(i) Are precautions against any overheating of the fluid provided? Yes □ No □

6. Overspeed Governor/Safety Rope/Suspension Gear Tests

(a) Governor ___________________________ Serial No. N.A.*/Fitted*

(b) Type ____________________________

<table>
<thead>
<tr>
<th>Device Tripping</th>
<th>Marked</th>
<th>Electrical</th>
<th>Mechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td></td>
<td>m/s</td>
<td>m/s</td>
</tr>
<tr>
<td>Speed Tripping</td>
<td></td>
<td>m/s</td>
<td>m/s</td>
</tr>
</tbody>
</table>

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 satisfactorily? 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
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.
State the speed: ___________ m/s OR

(b) instantaneous Type

8. Clamping Device Tests

(a) Progressive Type
Does the clamping device operate correctly when engaging with 125%*/150%* of the rated load uniformly distributed in the lift car? N.A.*/Fitted*

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

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 satisfactorily 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 applicable
Appendix C  Certification of Test and Examination for Escalators/Passenger Conveyors
CERTIFICATION OF TEST AND EXAMINATION FOR ESCALATORS/PAASSENGER CONVEYORS

Description of Installation
Location: ____________________________
Environment: Outdoor*/Indoor* Plant No.: ____________
Manufacturer: ________________________ Model No.: ____________
Identification 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 □
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: ____________________________
Voltage at Time of Test: _______ Rated Power: _______
Form of Overload Protection
☐ 3-Phase circuit breaker
☐ Overloads in each phase
☐ Others _______

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
CERTIFICATION OF TEST AND EXAMINATION FOR ESCALATORS/PASSenger CONVEYORS

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.
Observations: ____________________________
Yes ☐ No ☐

9. General (Escalator*/Passenger Conveyor* Work)
Have the following items where fitted been checked for correct operation?
(a) Emergency Stop Switches ☐ ☐
(b) Broken Step Chain Device ☐ ☐
(c) Broken Drive Chain*/Belt* Device ☐ ☐
(d) Handrail Inlet Switch ☐ ☐
(e) Non-reversal Device ☐ ☐
(f) Complate Switch ☐ ☐
(g) Operation Brake ☐ ☐
(h) Step Sagging Device ☐ ☐
(i) Skirt Panel Switch ☐ ☐
(j) Phase Protection Device ☐ ☐
(k) Overspeed Device ☐ ☐
(l) Broken Handrail Device ☐ ☐
(m) Auxiliary Brake ☐ ☐

0. General (Other Works)
Have the following items been properly provided
(1) (a) Notice/pictographs for Passengers ☐ ☐
(b) Guard at adjacent building obstacles and criss-cross escalators ☐ ☐
(c) Rigid guard adjacent to escalator handrail. ☐ ☐
(d) Notice on access door to machinery spaces? ☐ ☐
(2) Do the unrestricted landing areas comply with 1.2.1.1 of COP on The Design & Construction, Part 4? ☐ ☐
(3) Does the clear height above step*/belt* comply with 1.2.2 of COP on The Design & Construction, Part 4? ☐ ☐

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 ____________________________ Plant No. ____________________________
Manufacturer ____________________________ Lift Identification No. ____________________________
Levels Served ____________________________ Length of Travel ____________________________ m
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 ____________________________ m²  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
      (i) Governor
         Type ____________________________ Serial No. ____________________________
         N.A.*/Fitted*
      (ii) Safety Rope*/Suspension Failure Device*
         Does the triggering mechanism operate correctly? Yes □ No □
         N.A.*/Fitted*
   (b) Counterweight
      (i) Governor
         Type ____________________________ Serial No. ____________________________
         N.A.*/Fitted*
         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 □
         N.A.*/Fitted*

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
CERTIFICATION OF TEST AND EXAMINATION FOR ELECTRIC SERVICE LIFT

(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
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 satisfactorily?  
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)

<table>
<thead>
<tr>
<th>Lift Motor Speed (rpm)</th>
<th>Lift Speed (m/s)</th>
<th>Motor Input (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Load Down</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Load Up</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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?  
Yes ☐ No ☐
(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 with 10.1 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