



## GUIDELINES ON THE SAFE USE OF LIFTS AND ESCALATORS



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# **GUIDELINES ON THE SAFE USE OF LIFTS AND ESCALATORS 2010**



**DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH  
MINISTRY OF HUMAN RESOURCES  
MALAYSIA**

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## Foreword

These guidelines are prepared by the Department of Occupational Safety and Health (DOSH) with the cooperation of lift contractors and shall be cited as the Guidelines on the Safe Use of Lifts and Escalators.

The purpose of these guidelines are to:

- inform the owners and users of lifts and escalators of their responsibilities;
- inform the owners and users of lifts and escalators of the responsibilities of registered competent firms;
- create awareness among the owners and users of the safe use of lifts and escalators; and
- minimise accidents, breakdowns, vandalism and complaints relating to lifts and escalators.

These guidelines enable lift owners (such as building owners, co-owners, building management), registered competent firms and lift users to have a better understanding of the maintenance requirements and safe operation of lifts and escalators. The DOSH believes that with these guidelines, the lift owners can have a clear understanding of their responsibilities and roles.

These guidelines will be reviewed and updated from time to time to include any changes whenever necessary. We welcome all feedback regarding these guidelines.

I would like to thank the committee for contributing much of their energy and effort to the preparation of these guidelines.

Director General  
Department of Occupational Safety and Health  
Malaysia

2010

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## Abbreviations

|         |   |
|---------|---|
| CF      | Certificate of Fitness  |
| DOSH    | Department of Occupational Safety and Health  |
| FMA     | Factories and Machinery Act 1967 (Act 139)  |
| JMB     | Joint Management Body   |
| MALEA   | The Malaysian Lift and Escalator Association  |
| NADOPOD | Occupational Safety and Health (Notification of Accident, Dangerous Occurrence, Occupational Poisoning and Occupational Disease) Regulations 2004 |
| OSHA    | Occupational Safety and Health Act 1994 (Act 514)   |
| EBOPS   | Emergency Battery Operated Power Supply   |

## Interpretations

|                  |   |
|------------------|---|
| Competent Firm   | A firm with written approval from the Chief Inspector to carry out installation, repair, maintenance, alteration and demolition of lifts and escalators subject to terms set by the Chief Inspector.  |
| Chief Inspector  | Director General of DOSH  |
| Competent Person | A person with the qualifications, knowledge, skills and abilities to carry out tasks related to lifts and escalators and registered with the Chief Inspector.   |
| Inspector        | DOSH officer that includes the Chief Inspector, Deputy Chief Inspector and Senior Inspector appointed under Section 4 of FMA 1967   |
| Lift             | An appliance designed to transport passengers or goods or both from one level to another in a vertical direction by means of a lift car. The motion of the lift car is obtained through an electric motor coupled to the lifting element, and includes the machinery, suspension ropes, hydraulic rams, supports and enclosures required in connection therewith. |
| Maintenance      | Continuous maintenance, repair and servicing of lifts and escalators.   |
| Owner            | The person receiving the rents or profits from the lifts or escalators used, whether on his own account or as an agent or trustee for any other person or those who would receive the same if the premises or lifts/escalators were leased, and this includes building management companies or joint management bodies or corporate management.                   |



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## 1.0 Introduction

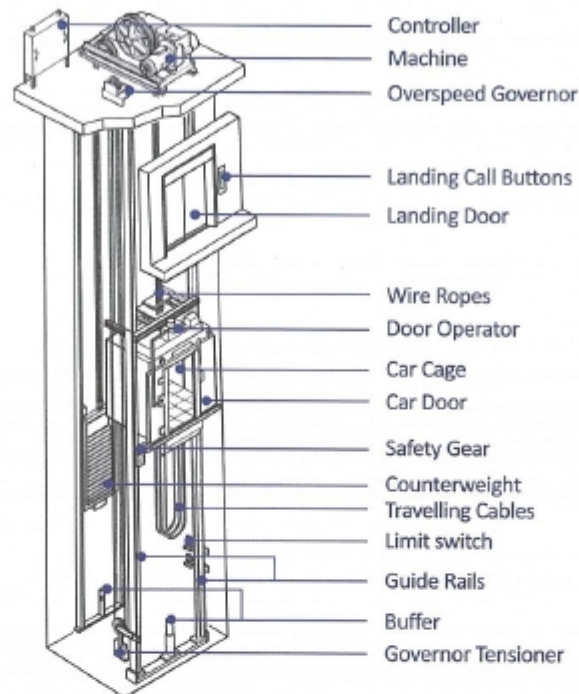
Today, lifts and escalators offer great convenience to society. As people go about their daily activities, they do not need to go through the trouble of climbing up and down staircases from one level to another. The benefits of using lifts and escalators are felt not only by those working or living in luxurious high-rise buildings but also by those living in low-cost buildings.

Lifts and escalators are machines which require care and scheduled maintenance to ensure that they can function properly without causing any problems to users. If maintenance is not conducted properly, breakdowns will occur which will lead to higher costs and downtime. Moreover, vandalism and misuse may also leave adverse effects on the performance of lifts and escalators.

It is the responsibility of the owners and competent firms to ensure that the lifts and escalators are inspected and maintained regularly. Adequate funds are required to carry out maintenance and inspections. The owners are encouraged to educate users on the safe operation of lifts and escalators to avoid accidents or unwanted occurrences.

Therefore, responsibilities regarding the safe use of lifts and escalators do not rest solely on the shoulders of the owner, competent firm, building management or DOSH but also on the shoulders of the user. This way, accidents involving lifts and escalators can be minimised.

## 2.0 General Operations of Lift System



Today, lifts and escalators offer great convenience to society. As people go about their daily activities, they do not need to go through the trouble of climbing up and down. For general operation of the lift system, the lift car cage is raised and lowered by wire ropes. The ropes are attached to the lift car cage and looped around a sheave. The sheave grips the hoist ropes so that when the sheave rotates, the ropes move and hence the lift car moves too.

The sheave is connected to the motor of the machine. When the motor turns one way, the sheave raises the lift car; when the motor turns the other way, the sheave lowers the lift car. Typically, the sheave, motor and controller of the lift system are all housed in a machine room above the lift shaft.

The ropes that lift the car are also connected to a counterweight which hangs on the other side of the sheave. The counterweight weighs about the same as a car filled to 50 per cent capacity. The purpose of this balancing is to conserve energy. Basically, the motor has to withstand only the difference in weight between the two sides of the lift car and the counterweight.

Both the lift car and the counterweight ride on guide rails along the sides of the lift shaft. The rails also work with the safety gear system to stop the car in an emergency.



Lifts are built with several safety systems that keep them in safer condition. The first line of defence is the rope system itself. Lifts are equipped with multiple ropes in the unexpected event that one of the ropes snaps, the remaining ropes will still be able to hold the lift.

Even if all of the ropes were to break, it is unlikely that a lift car would fall to the bottom of the shaft as lift cars have safety gear braking systems. When the car exceeds the designated speed, a speed limiting device called the overspeed governor will detect and activate the safety gear breaking system by gripping the rail.

Lifts also have electromagnetic brakes that function to halt lift operations. When the electromagnetic brakes are in open position, the lift car will move. In this system, the brakes will close automatically if the lift experiences a problem with electrical supply.

Lifts also have a limit switch installed near the top and bottom of the lift shaft. If the lift car moves too far in either direction, the switch will trigger the controller to bring the lift to a stop.

The bottom of the lift shaft has a shock absorber system called a buffer. The buffer works like a giant cushion to soften the impact should the lift move beyond the landing terminal.

Many modern lifts are controlled by microprocessor-based controllers. The controller processes all of the relevant information about the lift and drives the motor with the correct amount to put the lift car where it needs to be.

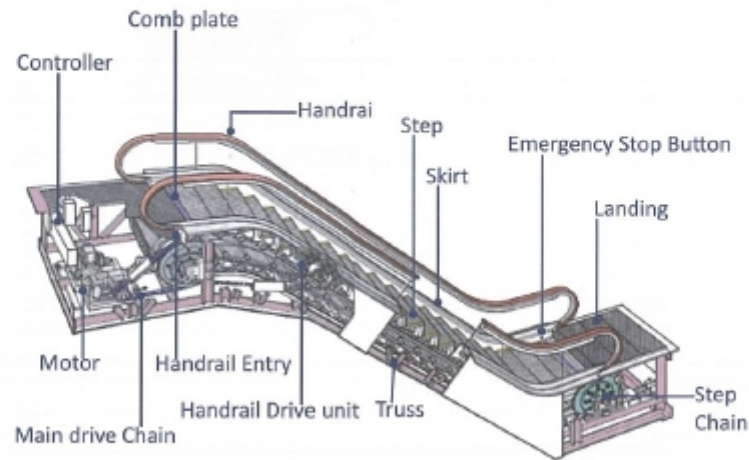
Most systems also have a load sensor to detect the load in the lift car. The load sensor tells the controller how full the car is. If the car exceeds the rated capacity, the controller will not move the car until it holds the accepted capacity.

Lifts use two different sets of doors: car doors that move with the lift car and landing doors at every landing the lift car stops at. The landing doors are essential to prevent users from falling down an open shaft. The doors on the cars are operated by a door operator, which is controlled by the lift controller.

#### Safety Devices in Lift Car

1. Alarm button – it gives an audible warning signal when help is required.
2. Door open/close button – it keeps the door open/closed when pressed.
3. Emergency lighting – it lights up the inside of the lift when the electricity supply fails.
4. Safety edge/door sensors – lift doors will open/reopen when an object is detected.
5. Overload device – it triggers the alarm when the rated load of the lift is exceeded.
6. Telephone/Intercom button – it permits verbal communication with the building management.

### 3.0 General Operations of Escalator System



An escalator is a moving staircase for transporting people between floors. It consists of three main parts:

- 1) A power unit consisting of a motor and a reduction gear box that provides power to drive the steps and handrail through the chain sprocket mechanism.
- 2) Moving stairs; a pair of rotating chain loops pulling a series of steps in an endless cycle. At the top and bottom of the escalator, these steps converge on each other, creating a flat platform. This makes it easier to get on and off the escalator.
- 3) Two travelling handrails moving in synchronous speed with the steps allowing passengers to hold with their hands.

Escalators are equipped with the following standard safety devices:

- 1) Combplate switch. A device to stop the escalator if a foreign object is caught between the step and comb plate.



- 2) Emergency stop button. A red button at either end of the escalator can be pressed to stop the escalator in the event of an emergency.



- 3) Handrail entry switch. To stop the escalator if an object or hand gets caught at the handrail terminal entry guard.
- 4) Step chain safety switch. To stop the escalator in case the step chain is broken or excessively elongated.
- 5) Skirt panel switch. To stop the escalator in case an object is trapped between the step and skirt panel.
- 6) Safety notices to be displayed at both ends of escalator.
- 7) Step demarcation line. In order to clearly delineate the edges of each individual step. A yellow trim is inserted.

#### Optional Safety Devices:

- 1) Deflector brush or rubber lining. This helps deflect garments, shoes and other items away from the gap between the moving step and the skirt panel.
- 2) Triangular guard – provided at the intersections of escalators or escalator to wall.
- 3) Step demarcation light. The illumination between steps and at both sides using LED or green fluorescent light to guide passengers upon entry and exit.

#### **4.0 Legislative Requirements And Standard**

##### **4.1 Acts and Regulations**

Laws and regulations that govern the use and operation of lifts and escalators are as follows:

##### **Occupational Safety and Health Act 1994 (Act 514)**

- Sections 15 and 18 of OSHA stipulate the duties and responsibilities of the owner (or building management) to ensure fixtures such as lifts and escalators are safe for use.
- Sections 20 and 21 of OSHA stipulate the general duties of the designers, manufacturers, suppliers such as competent firms to ensure fixtures such as lifts and escalators are safe for use.
- NADOPOD Regulations 2004 stipulate the requirement of reporting any accident involving lifts and escalators to DOSH.

##### **Factories and Machinery Act 1967 (Act 139)**

- Section 19 of FMA stipulates that no person shall be permitted to operate any certificated machinery without a valid CF.
- Regulations 31, 32 and 33 of Factories and Machinery (Electric Passenger and Goods Lift) Regulations 1970 stipulate the duties of competent firms, competent persons and lift owners.

##### **Others legislative aspects;**

- Fire Services Act 1988 (Act 341);
- Street, Drainage and Building Act 1974 - Uniform Building By-laws 1984;
- Electricity Supply Act 1990 (Act 447) – Electricity Regulations 1994;
- Building and Common Property (Maintenance and Management) Act 2007 (Act 663).

## 4.2 Malaysian Standard

Among the codes related to lifts and escalators are:

- MS 1184:2002 Code of Practice on Access for Disabled Persons to Public Buildings
- MS 1918:2006 Safety Rules for the Construction and Installation of Escalators and Passenger Conveyors
- MS 2021:2006 Safety Rules for the Construction and Installation of Lifts – Part 1: Electric Lifts
- MS 2021:2007 Safety Rules for the Construction and Installation of Lifts – Part 2: Hydraulic Lifts
- MS 2021:2008 Safety Rules for the Construction and Installation of Lifts – Part 3: Electric and Hydraulic Service Lifts
- MS ISO 4344:2004 Steel Wire Ropes for Lifts – Minimum Requirements

## 4.3 Penalty

In the case of failure to comply with any issued order or violation of laws, DOSH may take court action. If found guilty, the penalties are as follows:

- i. The maximum penalty imposed under OSHA is RM50,000 or imprisonment for a term not exceeding 2 years or both; or
- ii. The maximum penalty imposed under FMA is RM100,000 or imprisonment for a term not exceeding 2 years or both.

## 5.0 DUTIES AND RESPONSIBILITIES

In general, four parties are involved directly to ensure the safety and functionality of lifts and escalators. They include:

### 5.1 Government – DOSH

- i. To enforce OSHA and FMA, produce guidelines and promote the safe use of lifts and escalators.
- ii. To grant approval for every new installation of lifts and escalators with specified conditions.
- iii. To grant approval to firms that undertake installation, alteration and maintenance of lifts and escalators.
- iv. To certify competent persons.
- v. To carry out inspection and testing on new lifts and escalators before the issue of CF.
- vi. To carry out scheduled/regular inspections of lifts and escalators and to renew the CF every 15 months.
- vii. To investigate all reported accidents and complaints involving lifts and escalators.
- viii. To issue notices of prohibition/immediate prohibition if the lifts and escalators are found to be unsafe in any way.



- ix. To prosecute any individual/owner that violates the requirements of FMA or OSHA
- x. To promote public awareness of the safe use of lifts and escalators

## **5.2 Owner**

- i. To engage a competent firm for the installation, alteration, periodic examination and maintenance of lifts and escalators to ensure that they are in safe working order.
- ii. To enter into an agreement with a competent firm to carry out periodic maintenance and inspection. This agreement shall be for a period of not less than one year, and shall state the name of the competent person employed by the competent firm.
- iii. To ensure the competent firm carries out periodic maintenance every month and inspection once every three months.
- iv. To inform DOSH of any takeover or change of competent firm for the installation, alteration, periodic examination and maintenance of lifts and escalators.
- v. To ensure that the lifts and escalators are safe and functional and not limited to:

### **1) Lifts**

- a. Smooth operation of lift doors;
- b. Proper function of the car door reopening device such as safety edge, photocell and multi-beam sensor;
- c. Proper function of emergency devices in the lift car such as intercom, emergency light, alarm bell, car lighting and ventilation fan;
- d. Proper function of all buttons and indicators;
- e. Good levelling; and
- f. Sufficient safety signage.

### **2) Escalators**

- a. no broken teeth on any comb plate;
  - b. synchronised movement of handrail and step or pallet;
  - c. no broken demarcation cleat (if fitted);
  - d. sufficient safety signage;
  - e. proper function of emergency stop button;
  - f. proper installation of triangular guards at handrail intersection or narrow space between escalator and wall; and
  - g. no broken step or pallet;.
- vi. To notify the competent firm immediately of any damage to effect repair and improvement work.
  - vii. To ensure that the lift well and pit are well maintained, dry and clean, with no rubbish nor any part used for storage.

- viii. Only authorised persons are allowed to enter the motor/machine room. Proper signage must be posted at the entrance of the area. Only those responsible for carrying out maintenance and lift works are allowed to enter the motor/machine room.
- ix. To ensure that no material not forming part of lift equipment is stored in the motor/machine room. Access to the motor/machine room must always be safe and clear from any obstruction.
- x. To ensure that the lifts and escalators have valid CFs. The CF will be issued to the owner upon payment of the inspection fee made to the DOSH office. In the case of lifts, the owner must display the PMA registration numbers and the lift identification number in the lift car or adjacent to the main floor.
- xi. To display the name and telephone number of the competent firm to be contacted inside the lift car and also adjacent to the main floor, in the event of a breakdown or emergency. In the case of escalators, the display is at the top or bottom of the glass panel where it can be easily seen by users.
- xii. To maintain an up-to-date registration record as specified in the 2nd Schedule of the Factories and Machinery (Electric Passenger and Goods Lift) Regulations 1970. The content of the register is as shown in Appendix 2.
- xiii. To be present during inspections by DOSH and to produce the register, inspection record or inspection log book to the DOSH Inspector.
- xiv. To provide and display the safety instruction on the safe use of lifts and escalators to the users.
- xv. To take action on any comments forwarded by the competent firm within 7 days. If no action is taken by the owner within 7 days, the competent firm shall inform DOSH.
- xvi. To take remedial action based on the comments written in the log book by DOSH Inspectors.
- xvii. To take immediate action upon receiving notice of prohibition/notice of immediate prohibition issued by the DOSH inspector.
- xviii. To report immediately any accident or dangerous occurrence pertaining to lifts and escalators and also submitting form JKPP 6 (refer to Appendix 4) to the nearest DOSH office. This is in accordance with the provisions of NADOPOD regulations.
- xix. To maintain ventilation in the lift car so that users are comfortable. Meanwhile, ventilation in the motor/machine room is also needed to avoid overheating which mechanism.
- xx. To keep locked the entrance door to the machine room to prevent unwanted individuals from entering the room.
- xxi. To ensure the use of the lift is restricted to that for which it was designed.

### 5.3 Competent Firm

- i. To ensure a proper standard of examination, service and maintenance of lifts and escalators so that they are a safe and functional.
- ii. To employ a competent person to carry out maintenance and in-house inspection of the lifts and escalators. The competent person shall make such entries within one week of the inspection as stipulated in the register:
  - a) Details of every examination, servicing and adjustment;
  - b) Details of any repair to the lift carried out by the competent person and the date when such repair was effected;
  - c) Details of the breakage of any suspension rope, the failure of any part of the lift machine, overspeeding of the car whether or not the safety gear functioned and any other occurrence resulting in the lift being immobilised; and
  - d) Such other information as the Chief Inspector may direct from time to time.
- iii. To ensure that the competent person carries out periodic examination of the lift at least once every three months and servicing and adjustment once every month.
- iv. To inform DOSH when no action is taken on the repairs necessary by the owner after one week of receipt of the report from the competent firm.
- v. To notify the owner to shut down any lifts and escalators that are found to be dangerous to users and to inform DOSH immediately.
- vi. To accompany and assist the Inspector in carrying out inspections or investigations following accidents involving the lifts and escalators.
- vii. To place safety barricades at the lift entrance or escalator landing while carrying out maintenance work.
- viii. To respond to breakdown of lifts and escalators and perform rescue operation as soon as possible.
- ix. To provide and update information on the safe use of the lifts and escalators to the owner.
- x. To explain the content of the agreement and the responsibility of the competent firm to the owner and also adhere to the latest DOSH directive.
- xi. To notify DOSH upon any termination of agreement or taking over of lift and escalator maintenance from another competent firm.



#### 5.4 User

- i. To use the lifts and escalators in a courteous manner to prevent the occurrence of accidents or breakdowns.
- ii. To inform the owner or building management of any abnormal condition of the lifts and escalators.
- iii. To follow and practise safe use of the lifts and escalators for the sake of personal safety and the safety of others.
- iv. To lodge a report with the owner/building management immediately in the case of damage, vandalism, dangerous occurrences or accidents related to the lifts and escalators.

#### 6.0 Safety Information

##### 6.1 Notices to be displayed

###### 6.1.1 Notices displayed on the operation board in the lift

1. Do not exceed the rated load (kg) and number of persons.
2. Children must be accompanied by adults.
3. Smoking is strictly prohibited in the lift car.
4. Press the alarm button in case of entrapment.
5. Emergency contact number.

###### 6.1.2 Clear safety signs must be displayed on the glass panel near the entrance to the escalator:

- a. No baggage trolley, hand trolleys, shopping carts or similar items;
- b. No baby carriages, wheelchairs or similar items;
- c. Small children must be held firmly when riding the escalator;
- d. Pets must be carried when riding the escalator;
- e. Stand facing the direction of travel, keep feet away from sides and not exceeding the yellow line on the escalator;
- f. Hold the handrail;
- g. Keep loose clothing clear of escalator steps, combs and sides; and
- h. Emergency contact number.



## 6.2 Do's and Don'ts

### 6.2.1 Safe and Proper Use of Lifts

1. To ensure that the lift runs smoothly, press the button for the floor required only.
2. Obey the load (maximum number of passengers) stated in the lift car. If the lift is full, wait for the next lift. The alarm will sound when overloading is detected and will only stop once the last user has exited the lift car. The lift will only move when the load has decreased.
3. Do not exceed the permitted load weight. Large, heavy loads may damage the lift.
4. Be careful on entering/exiting the lift in case the lift floor is not level with the landing floor.
5. Do not obstruct movement of the lift doors and damage other equipment in the lift.
6. Behave while in the lift. Jumping and playing in the lift may activate the safety device and cause the lift to stop. Use the lift wisely, courteously and safely.
7. Stay clear of lift doors, especially when the lift doors are opening or closing. Be careful not to touch or lean against the doors. Your hand or arm may be caught, resulting in injury when the doors open.
8. Do not use the lift in the case of fire. Use the stairs instead.
9. Do not play with the emergency stop button.
10. Children must be accompanied by adults when using lifts.
11. To avoid affecting the operation of the lift, do not press lift buttons mischievously.
12. To avoid causing any damage to lift buttons, do not press buttons with any sharp objects but your fingers.
13. When trapped inside a lift, keep calm and summon for help by using the alarm bell and intercom. Do not attempt to leave the car by forcing the doors open. It is safer to stay inside the lift.



14. Do not attempt to rescue the trapped passengers when the lift breaks down. Contact the building management for assistance.
15. Do not allow children to play around the lift lobby area and lean against the lift doors as it could lead to serious accidents if the lift doors were to open.
16. Do not smoke in the lift car.



#### 6.2.2 Safe and Proper Use of Escalators



1. Do not take:
  - a) Baggage trolleys, hand trolleys or similar items; and
  - b) Baby carriages, wheelchairs or similar items.
 This may lead to accidents such as falling off or slipping from the escalator.
2. Do not try to travel in the opposite direction.
3. Do not face the opposite direction of travel. This may lead to imbalance or a fall.
4. Do not sit on the escalator step. It may cause serious injury.
5. Do not touch the step (moving parts), comb, skirt guard panel or handrail inlet. This may lead to serious injury, such as the hand becoming entangled.
6. Do not place any package on the moving steps, handrail, deck board or landing plate. The package may fall and cause serious injury to or inconvenience other passengers.
7. Do not lean over the sides of handrails as it may cause serious injury, especially at the escalator intersections.



8. Keep loose clothing from brushing against steps. The clothing may get caught between steps or between the skirting panel and the step, leading to an accident.
9. Do not run or walk on the escalator as it can lead to an accident.
10. Do not carry handbags or other objects on the outside of the handrail.
11. Do not play near the escalator.
12. Do not take animals on the escalator. It may lead to an accident.
13. Do not extend any part of your body out of the escalator to avoid being caught in narrow spaces or falling from the escalator.
14. Do not vandalise the obstruction guards.
15. Do not stop when getting off the escalator.
16. Keep your feet away from the skirting or yellow stripes to avoid getting your feet caught in the gap between steps or the gap between the skirting panel and the step.
17. Do not play with the emergency stop button which is to be used only in emergency situations.
18. Do not get on a step with wet shoes or hold a handrail with wet hands. Slippery shoes and hands can lead to an accident.
19. Do not stick the tip of your umbrella into the groove of the escalator step as it may become caught and may lead to an accident, subsequently causing the escalator to malfunction.
20. Do not use the escalator in the event of a fire or an earthquake.
21. Do not use the escalator when it is not in operation.

## **7.0 Emergency Response Procedure**

### **7.1 Lifts**

#### **7.1.1 Action by trapped person**

- i. When a person is trapped inside the lift, he should remain inside the lift car. Press the alarm bell button repeatedly to attract the attention of people outside the car. Use the intercom by pressing the telephone button to communicate with the building management. Stay calm, do not panic and wait for help to arrive.
- ii. If power fails and you are trapped in the lift, stay calm and do not panic. The emergency light will go on automatically.
- iii. If the lift suddenly stops functioning or stops under dangerous circumstances, never try to force open the lift car doors from inside. This may only further endanger the situation.

#### **7.1.2 Action by people outside the lift**

- i. Try to calm the trapped person and inform him that help is on the way. Advise the trapped person not to force open the lift car doors.
- ii. Never try to force open the lift car doors.
- iii. Contact the building management and provide the required information such as the building name, lift number, number of trapped persons and condition of the lift.

#### **7.1.3 Action by the owner/building management**

- i. Try to calm the trapped person and reassure him that help is on the way. Advise the trapped person not to force open the lift car doors.
- ii. Contact the competent firm immediately for rescue by giving the required information such as the building name, lift number, number of trapped persons and condition of the lift.
- iii. Contact the relevant authority in the event the trapped person requires immediate medical assistance or treatment.
- iv. Coordinate the rescue operation with the competent firm and ensure that the rescue operation is carried out effectively.

#### **7.1.4 Action by competent firm**

- i. Respond to emergency call immediately.
- ii. Carry out the rescue in accordance with the existing standard rescue procedure.

### **7.2 Escalators**

1. In case of emergency, push the emergency stop button to stop the escalator.
2. Call the building management.
3. Try to calm the victim and wait for the rescue team.



## References

1. Building and Common Property (Maintenance and Management) Act 2007 (Act 663)
2. Code of Practice for Lift Works and Escalator Works, 2002, EMSD, Hong Kong
3. Factories and Machinery Act 1967 (Act 139)
4. Guideline for Safe Use of Lifts and Escalators, EMSD, Hong Kong
5. Lift Owner Guidebook, 2003 Edition, Hong Kong
6. Lift Owners Guide, August 2005, Singapore
7. MS 1184:2002 Code of Practice on Access for Disabled Persons to Public Buildings
8. MS 1918:2006 Safety Rules for the Construction and Installation of Escalators and Passenger Conveyors
9. MS 2021:2006 Safety Rules for the Construction and Installation of Electric Lifts
10. Occupational Safety and Health Act 1994 (Act 514)
11. Owners Handbook Lifts and Escalators, March 2006, Australian Lift Association (AEA)



## APPENDICES

### Appendix 1 Certificate of Fitness

|  |                 |   |  |
|--|-----------------|---|--|
| JKJ16-Pin. 287   |                 | PPA - WP 0325   |  |
|  <p><b>KERAJAAN MALAYSIA</b><br/> <b>AKTA KILANG DAN JENTERA, 1967</b><br/> <b>THE FACTORIES AND MACHINERY ACT, 1967</b></p> <p>Peraturan-peraturan (Pemberitahu, Perakuan Kelayakan dan Pemeriksaan) Kilang dan Jentera, 1970<br/>         Peraturan 10(2)<br/> <i>The Factories and Machinery (Notification, Certificate of Fitness and Inspection) Regulations, 1970</i><br/>         Regulation 10(2)</p> <p><b>Perakuan Kelayakan</b><br/> <b>MESIN ANGKAT</b><br/> <i>(selain Mesin Angkat guni ringan)</i></p> |                 | <b>850183</b>   |  |
| Perakuan ini adalah sah hingga (lihat syarat-syarat di bawah)  |                 | 13/10/2010  |  |
| Nama Pemunya/Penduduk  |                 | KHONG & JAAFAR (PROPERTY MANAGEMENT) SDN BHD  |  |
| Alamat Pos   |                 | G7 Block C, Megan Avenue 2 No. 12, Jin Yap Kwan Seng, 50400 Kuala Lumpur  |  |
| Dengan ini diperakui bahawa Mesin Angkat tuam telah saya periksa pada  |                 | 18/02/2009  |  |
| dan saya puas hati yang ia boleh dijalankan pada beban yang tidak lebih daripada   |                 | 900.00 kg kilogram  |  |
| Peti-butir tentang Mesin Angkat  | No. Pendaftaran | PMA35508  |  |
|  | Nama Pembuat    | KONG  |  |
|  | No. Pendaftaran | 973092  |  |
|  | Pertihai        | UF Penumpang  |  |
|  | Pangsa          | 20 kw kilowatt  |  |
|  | Kedudukan       | MEGAN AVENUE 2 NO. 12, JIN YAP KWAN SENG 50400 KUALA LUMPUR   |  |
| <p>*PERAKUAN INI adalah sah hingga tarikh di atas, melainkan jika telah digantung, dibatalkan atau dengan jalan lain ditamatkan terlebih dahulu di bawah peruntukan-peruntukan Akta tersebut dan dengan syarat bahawa peratur-peraturan peruntukan Akta tersebut dan Peraturan-peraturan berkenaan dengan mesin angkat di atas tidak diilang.</p>  |                 |   |  |
| Tarikh   |                 | 03/02/2010  |  |
|  |                 | <br><b>Azawati binti Zaidi</b><br>Pemeriksa Kilang dan Jentera |  |
| <p>*Perakuan ini dikeluarkan kepada tuam dengan syarat bahawa petunjuk-petunjuk di dalam surat saya kepada tuam rujukan _____ bertarikh _____ telah dijalankan sebagaimana yang dinyatakan di dalam jawapan tuam rujukan _____ bertarikh _____</p>   |                 |   |  |
| CATATAN - Perakuan ini bukanlah resit untuk apa-apa bayaran  |                 |   |  |

10118793-PMR, K.L.

## **Appendix 2 - Register of Lifts (Second Schedule, Factories and Machinery (Electric Passenger and Goods Lift) Regulations 1970**

**The register should contain the following information:**

- (1) Name and postal address of the owner of the lift
- (2) The address where the lift is installed (location of the lift)
- (3) The date the lift was installed and the name of the contractor installing the lift
- (4) Name and postal address of the maintenance contractor and the commencement date of maintenance
- (5) Name of competent person
- (6) Lift specification number

### **Information about lift works**

- (1) Date of competent person's examination
- (2) Safety gear last tested
- (3) Condition of safety gear
- (4) Landing door locking devices last tested
- (5) Condition of ropes
- (6) Date ropes were last renewed
- (7) Condition of controller
- (8) Condition of brake
- (9) Date brake linings were last changed
- (10) Reduction gear: thrust bearings, main bearings, worm gear, spur wheel if applicable
- (11) Condition of gear oil
- (12) Date oil was last changed
- (13) Normal terminal stopping devices tested
- (14) Condition of normal terminal stopping devices
- (15) Final terminal stopping devices last tested
- (16) Condition of final terminal stopping devices
- (17) Condition of wiring
- (18) Details of any repairs necessary
- (19) Remarks
- (20) Signature of competent person
- (21) Name and signature of lift owner or his agent (e.g. representative of the management company). Additional items to be recorded in register
- (22) Data, machine serial number, electric schematic diagram, alteration
- (23) Type of work (lift failure, trapped passengers or routine maintenance)
- (24) Date and time of trapped passengers' release
- (25) Cause of lift failure or work completed and/or parts replaced
- (26) Date and time when lift resumes operation

### Appendix 3 - Notice of Prohibition/Notice of Immediate Prohibition, FMA (JKJ 26 Form)

|  |                              |
|--|------------------------------|
| <b>ASAL</b>  | (J.K.J. 26)                  |
| <p>AKTA KILANG DAN JENTERA, 1967<br/>         PERATURAN-PERATURAN (PEMBERITAHU, PERAKUAN KELAYAKAN DAN PEMERIKSAAN)<br/>         KILANG DAN JENTERA, 1970</p>                                |                              |
| <p><b>*PEMBERITAHU LARANGAN</b><br/> <b>*PEMBERITAHU LARANGAN SERTAMERTA</b></p>   |                              |
| <p>Adalah saya memaklumkan bahawa suatu pemeriksaan.....<br/>         yang telah saya lakukan pada.....di.....<br/>         menunjukkan bahawa kecacatan-kecacatan yang berikut:</p>         |                              |
| <p>dan dengan itu tuan adalah melanggar:</p>   |                              |
| <p>Di bawah peruntukan-peruntukan (.....) Akta Kilang dan Jentera, 1967) saya dengan ini menghendaki tuan</p>  |                              |
| <p>* membuang atau membetulkan kecacatan sebelum.....dan jika kecacatan tersebut tidak dibuang atau dibetulkan pada tarikh itu, tuan hendaklah berhenti daripada mengendalikan.....tuan.</p> |                              |
| <p>* BERHENTI MENGGUNAKAN ATAU BERHENTI MENGENDALIKAN.....<br/>         .....TUAN SEHINGGA KECACATAN TERSEBUT DIBUANG ATAU DIBETULKAN HINGGA MEMUASKAN HATI SAYA.</p>                        |                              |
| <p>Perakuan Kelayakan No.....adalah:</p>   |                              |
| <p>* digantung daripada tarikh tersebut di atas di bawah peruntukan-peruntukan Akta tersebut jika kecacatan tidak dibuang atau dibetulkan pada tarikh tersebut.</p>                          |                              |
| <p>* DENGAN INI DIGANTUNG MULAI DARI HARI INI.</p>   |                              |
| Tarikh.....  | Pemeriksa Kilang dan Jentera |
| Kepada.....  |                              |
| <p>PNMB, K.L. * Petong yang tidak berkenaan.</p>   |                              |



## Appendix 4 - JKPP 6 Form

| <b>LAPORAN MENGENAI KEMALANGAN/KEJADIAN BERBAHAYA</b><br><small>PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN (PEMBERTAHUAN MENGENAI KEMALANGAN, KEJADIAN BERBAHAYA, KERACUNAN PEKERJAAN DAN PENYAKIT PEKERJAAN) 2004</small>  |   |
|--|---|
| <b>Bagian A - Maklumat Pembertahu</b><br><small>Pembertahu - Peraturan 6 (1)(a)(2) Majlis</small>  | <b>Bagian B - Orang yang terlibat</b><br><small>(Jika lebih dari seorang, sila gariskan baris berkenaan)</small>  |
| Nama <input type="text"/><br>Jawatan <input type="text"/><br>Nama & Alamat Organisasi <input type="text"/><br>No. R.O.C. <input type="text"/> No. Pendaftaran JKPP <input type="text"/><br>Orang yang boleh dihubungi (Jika lain dari atas) <input type="text"/><br>No. Telefon <input type="text"/><br>Kod Klasifikasi Industri (Jadual 3) <input type="text"/> | Nama <input type="text"/><br>Tarikh Lahir <input type="text"/><br>No. K.P. atau No. Pasport <input type="text"/><br>Warganegara <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/><br>Pekerjaan <input type="text"/><br>Nama & Alamat Organisasi <input type="text"/><br>Tempat Kejadian <input type="text"/><br>Tarikh dan Masa Kejadian <input type="text"/><br>Tarikh Mula Laporan kepada JKPP <input type="text"/> |
| <b>Bagian C - Huraian kemalangan atau kejadian berbahaya</b><br>Sila huraikan apa yang berlaku sebelum, semasa dan selepas kejadian.   |   |
| <div style="border: 1px solid black; height: 150px; width: 100%;"></div>   |   |
| <div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 5px;"></div> Tanda Tangan Pembertahu   |   |
| <div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 5px;"></div> Tarikh  |   |
| <b>Pesilatan</b><br><small>Mengap (orang) ya tidak menyalakan pengaliran ke atas sebarang kord/ tali orang yang tinggal hidup.</small>   |   |

## Appendix 5 - DOSH Directory

| <b>Department of Occupational Safety and Health<br/>(Ministry of Human Resources)</b><br>Levels 2, 3 & 4, Block D3, Complex D<br>Federal Government Administrative Centre<br>62530 Federal Territory of Putrajaya<br>Tel : 03-8886 5000 Fax : 03-8889 2443<br>Email : jkkp@mohr.gov.my Website : www.dosh.gov.my |   |  |
|--|---|--|
| <b>DOSH Kuala Lumpur/Putrajaya</b><br>17th Floor, PERKESO Tower,<br>281, Jalan Ampang,<br>50534 Kuala Lumpur<br>Tel : 03-4257 6066 / 03-4257 3793 /<br>03-4257 3704<br>Fax : 03-4257 2991<br>Email : jkkpwp@mohr.gov.my  | <b>DOSH Selangor</b><br>7th Floor, Conspiant 2 Building,<br>Jalan SS16/1,<br>47500 Subang Jaya, Selangor<br>Tel : 03-5623 6400<br>Fax : 03-5638 9159<br>Email : jkkpsl@mohr.gov.my  | <b>DOSH Johor</b><br>9th Floor, TJB Tower,<br>Jalan Dato' Mohd Mufti,<br>80534 Johor Bahru, Johor<br>Tel : 07-223 7071 / 07-224 2122 /<br>07-224 3076<br>Fax : 07-224 2667<br>Email : jkkpjh@mohr.gov.my     |
| <b>DOSH Penang</b><br>Level 3A, Sempelai Jaya Complex,<br>Jalan Sempelai,<br>13700 Seberang Jaya, Penang<br>Tel : 04-399 1144 / 04-399 4106<br>Fax : 04-390 8844<br>Email : jkkppp@mohr.gov.my   | <b>DOSH Perak</b><br>3rd Floor, Sri Kinta Building,<br>Jalan Sultan Idris Shah,<br>30000 Ipoh, Perak<br>Tel : 05-254 9711 / 05-253 0629 /<br>05-242 1925<br>Fax : 05-255 5219<br>Email : jkkppk@mohr.gov.my   | <b>DOSH Kedah</b><br>Level 5, Zon A, Wisma Persekutuan<br>Pusat Pentadbiran Kerajaan Persekutuan,<br>06550 Bandar Muazam Shah, Kedah<br>Tel : 04-700 0100<br>Fax : 04-732 9659<br>Email : jkkpkd@mohr.gov.my |
| <b>DOSH Terengganu</b><br>3rd Floor, Federal Building,<br>Jalan Sultan Ismail,<br>20200 Kuala Terengganu, Terengganu<br>Tel : 09-622 5288<br>Fax : 09-623 6654<br>Email : jkkptg@mohr.gov.my   | <b>DOSH Negeri Sembilan</b><br>11th Floor, Federal Building,<br>Jalan Dato' Abdul Kadir,<br>70000 Seremban, Negeri Sembilan<br>Tel : 06-761 2828 / 06-762 1913<br>Fax : 06-764 3143<br>Email : jkkpns@mohr.gov.my   | <b>DOSH Pahang</b><br>3rd Floor, Federal Building,<br>Jalan Gambut,<br>25000 Kuantan, Pahang<br>Tel : 09-516 1014 / 09-516 1691<br>Fax : 09-516 1215<br>Email : jkkpph@mohr.gov.my                           |
| <b>DOSH Kelantan</b><br>9th Floor, Federal Building,<br>Jalan Bayam,<br>15534 Kota Bharu, Kelantan<br>Tel : 09-748 2875 / 09-748 8745<br>Fax : 09-747 9745<br>Email : jkkpkn@mohr.gov.my   | <b>DOSH Sabah &amp; Federal Territory of Labuan</b><br>1st Floor, Right Wing,<br>PERKESO Building,<br>No. 11, Lorong Sempelang,<br>88100 Kota Kinabalu, Sabah<br>Tel : 088-235 855 / 088-230 855 / 088-253 576<br>Fax : 088-233 367<br>Email : jkkpsb@mohr.gov.my | <b>DOSH Sarawak</b><br>14th Floor, Somerset Gateway Building,<br>No. 9, Jalan Bukit Mata,<br>93300 Kuching, Sarawak<br>Tel : 082-242 257<br>Fax : 082-259 846<br>Email : jkkpsw@mohr.gov.my                  |
| <b>DOSH Melaka</b><br>Level 3 & 4, Menara Persekutuan,<br>Jalan Persekutuan Hang Tuah Jaya,<br>75450 Ayer Keroh, Melaka.<br>Tel : 06-234 5123 - 129<br>Fax : 06-234 5121<br>Email : jkkpmk@mohr.gov.my   | <b>DOSH Perlis</b><br>Aras 5, Zon A, Wisma Persekutuan<br>Pusat Pentadbiran Kerajaan Persekutuan,<br>06550 Bandar Muazam Shah, Kedah<br>Tel : 04-700 0100<br>Fax : 04-732 9659<br>Email : jkkpps@mohr.gov.my  |  |