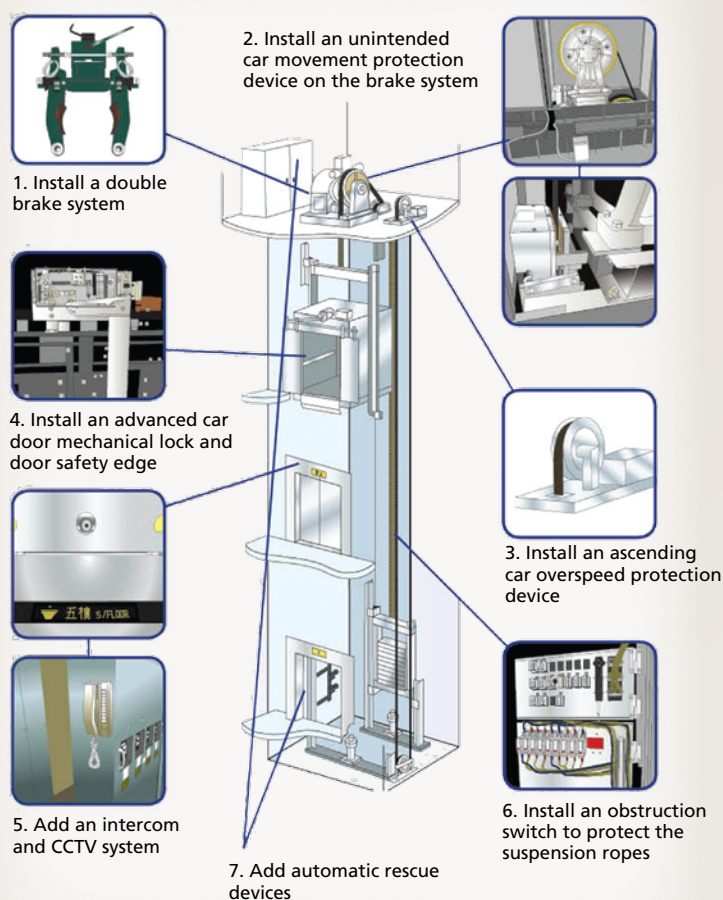
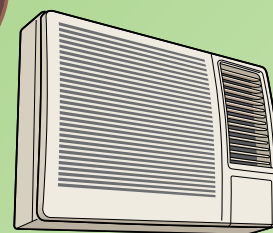


Modernising Old Lifts



Safe Use of Washing Machines



Safe Use of Window Type Air Conditioners

Upgrading of Energy Efficiency Grading Standards

ENERGY LABEL 能源標籤	
more efficient 效益較高	
1	
2	Grade 2
3	
4	
5	
less efficient 效益較低	
Annual Energy Consumption (kWh) 每年耗電量 (千瓦小時)	228
Fresh Food Volume (m³) 保鮮格容量 (立方米)	100
Frozen Food Volume (m³) 冰櫃容量 (立方米)	40
Refrigerating Appliance 冷凍器具	
Brand 品牌:	ABC 某某牌
Model 型號:	HK001
Reference Number / Year 參考編號 / 年份	U1-R080123 / 2014
Information Provider 資料提供者:	XVZ 某某廠

Annual Energy Consumption. A lower value denotes more energy can be saved.

U1-R080123/2014

機電工程署 EMSD

Guidance Notes on Liquefied Petroleum Gas Storage Installations



From the Editor

Thanks to your continued support, the E&M Safety Newsletter is already putting out this 23th issue. It has a rich diversity of contents. We have cartoon characters introducing to you the improvements that may be made to old style lifts. We also run features on upgrading of energy efficiency grading standards as well as the owners' duties for LPG storage installations. Moreover, we provide you with electrical safety tips, including how to use amusement rides for children safely, and how to use electrical appliances like washing machines and window type air conditioners safely. As summer holiday begins, we would like to wish everyone a happy and well-deserved break.

Safe Use of Kiddie Rides

Apart from large-scale amusement rides such as Ferris wheels and roller coasters, EMSD is also responsible for regulating the safety of kiddie rides. Since most of the kiddie rides do not require operation by staff attendants, their safe use depends on the self-discipline of users. Parents and children should refer to the following illustrations for matters that require attention when using kiddie rides.

Before getting on the kiddie ride, read and follow the safety instructions. Pay attention to the seating capacity and weight limit. Do not overload the ride.



請勿搖晃遊戲機
Do not rock the ride



Neither the rider(s) nor the person(s) around should rock the ride to avoid bodily injury or damage to the machine parts.

Sit on the designated seat when riding on the kiddie ride. Do not reach out of the ride to avoid falling off and getting hurt.



請勿進入圍欄範圍
Do not enter into restricted area



When the ride is in motion, stay out of the fenced area or the area as specified on the warning sign to avoid bodily injury from collision.

Modernising Old Lifts

Lifts is an important vertical means of transport which we use every day in Hong Kong, a city with a high density of tall buildings. Heavy use means that wear and tear of lift parts is inevitable. With a view to enhancing the technical integrity and safety of old lifts, EMSD published a promotion booklet "Guidelines for Modernising Existing Lifts" last year to provide responsible persons of lifts with enhancement and modernisation solutions for making their lifts safer, more effective, reliable and comfortable. The following four solutions (as presented in Figures 1 to 4), meriting priority consideration, are the most effective and efficient ways to enhance the safety, reliability and comfort of old lifts. The remaining three solutions (as presented in Figures 5 to 7) will be introduced to readers later.

1. Install a Double Brake System

Old lifts are mostly fitted with only one brake and so a breakdown of the brake system may lead to a failure of the lift car's braking function. A double brake system can enhance safety as it has all the main brake parts in two sets, so that in the event that one set of parts fails, the other set will ensure the safe operation of the lift.

A modern double brake system has two independent braking devices, each of which is electrically monitored.

2. Install an Unintended Car Movement Protection Device

Installation of an unintended car movement protection device is a new requirement. Unintended movement of the lift car while the doors are open and passengers are entering or exiting the lift car could result in injuries. This device is equipped with a self-monitoring system which can protect the lift car from any unintended movement, thus enhancing passenger safety. Rope gripper is a commonly used device.

3. Install an Ascending Car Overspeed Protection Device

Installing an ascending car overspeed protection device can protect an ascending car from overspeeding in the event of a system failure. The protection device automatically detects and stops any overspeed movement of the ascending lift car, reducing the risk of the ascending



1. Install a double brake system



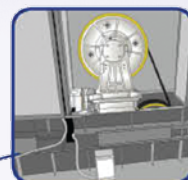
4. Install an advanced car door mechanical lock and door safety edge



5. Add an intercom and CCTV system



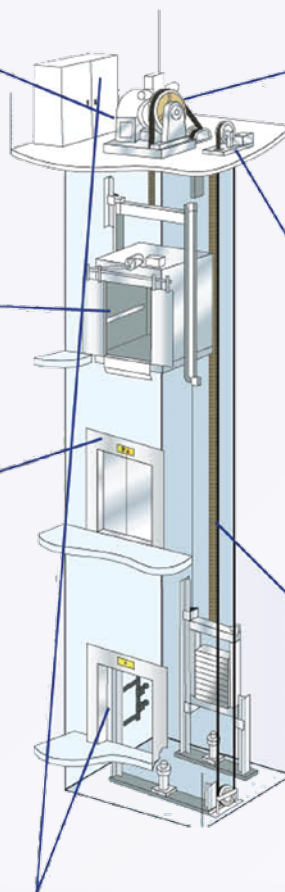
2. Install an unintended car movement protection device on the brake system



3. Install an ascending car overspeed protection device



6. Install an obstruction switch to protect the suspension ropes



7. Add automatic rescue devices

lift car from accidentally hitting the top of the lift well, and thus protecting passengers from injuries.

4. Install a Car Door Mechanical Lock and Door Safety Edge

Installing car door mechanical locks in old lift doors has the benefit of preventing passengers inside the lift car from forcibly opening the lift doors, which can be dangerous. A door safety edge can automatically initiate the re-opening of the door should a passenger be struck by the door as it is closing.

Moreover, freight lifts, which are originally designed in accordance with relevant standards before 2000, have lower average floor loading capacity than passenger lifts. If these freight lifts are used to carry passengers, they are more prone to overloading. In order to prevent accidents caused by overloading, if there are changes of use of any freight lifts, responsible persons of these freight lifts should engage registered lift contractor to carry out necessary improvement works, which shall be approved by EMSD.

Safe Use of Washing Machines



- ★ Do not put the washing machine in a humid spot or an area where water may accumulate, such as in the bathroom or other outdoor areas, to prevent the inner components of the machine from getting wet and causing electricity leaks or fire.

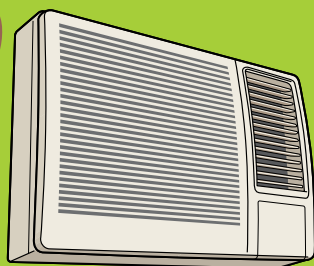


- ★ Avoid leaving an operating washing machine unattended.
- ★ Do not spray combustible chemicals such as pesticides near an operating washing machine to avoid explosion.



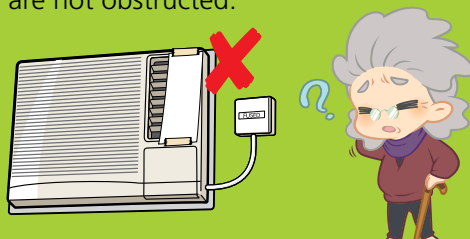
- ★ Allow sufficient space around the washing machine for heat dissipation to prevent overheating during operation.
- ★ Remove all articles such as coins from the pockets before washing, and clear the drainage filter regularly to prevent overheating of the water pump motor due to accumulation of foreign objects.
- ★ Follow the instructions in the user manual. Do not exceed the loading capacity specified in the manual to avoid overheating of the appliance caused by overloading or prolonged washing.

- ★ Do not connect other electrical appliances to the same socket outlet of the washing machine.
- ★ If any anomaly (such as noise or odour) is detected during operation, stop the machine immediately and arrange inspection and repair by a qualified technician.

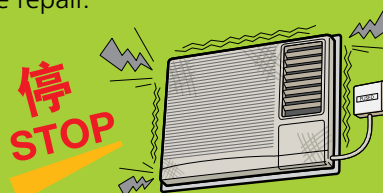


Safe Use of Window Type Air Conditioners

- ★ The newly installed air conditioner must first be inspected by a registered electrical contractor before connecting to fixed power supply.
- ★ Clean the filters regularly and ensure that the air grilles are not obstructed.



- ★ To avoid damage to the components, do not restart the air conditioner within three minutes of switching it off.
- ★ Switch off the air conditioner in a room not in use.
- ★ If any abnormalities (e.g. excessive noise or vibration, or abnormal smell) are detected, stop the unit and arrange repair.

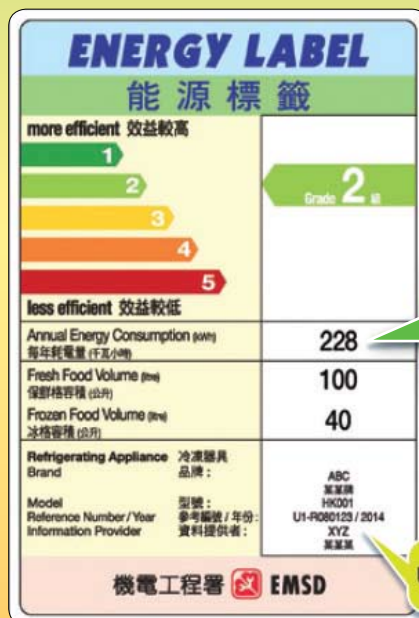


Upgrading of Energy Efficiency Grading Standards

The diagram below shows the difference between the existing energy label and the new grading energy label



Energy label using existing grading standards



Energy label using new grading standards (will be fully implemented from 25 November 2015)

The Mandatory Energy Efficiency Labelling Scheme (MEELS) has been in full implementation through the Energy Efficiency (Labelling of Products) Ordinance since 9 November 2009. Currently, MEELS covers five types of household electrical products, namely room air conditioners, refrigerating appliances, compact fluorescent lamps, washing machines and dehumidifiers. Under MEELS, energy labels are required to be shown on the above prescribed products for supply in Hong Kong so consumers may have knowledge of their energy efficiency performance.

To further enhance energy efficiency, the Electrical and Mechanical Services Department (EMSD) endeavours to encourage importers to introduce more energy efficient electrical products to enable the public to reduce electricity consumption, save money and reduce carbon emissions. EMSD published the Code of Practice on Energy Labelling of Products 2014 (the Code) on 31 October 2014 to upgrade the energy efficiency grading standards of room air conditioners, refrigerating appliances and washing machines by an average of approximately 30%. The Code will be fully implemented from 25 November 2015. From that date onwards, energy labels with new energy efficiency grading must be shown on the above three types of electrical products for supply in Hong Kong. It is estimated that an annual electricity saving of about 300 million kWh will be achieved upon implementation of new energy efficiency grading standards for these three types of products.

The following salient points should be noted with regard

to the upgrading of energy efficiency grading standards:

1. The existing energy labels displaying the old energy efficiency grading (old grading) will remain valid before 25 November 2015.
2. From 25 November 2015 onwards, the energy label shown on any room air conditioners, refrigerating appliances and washing machines should display a new energy efficiency grading (new grading). Retailers may change the old grading energy labels shown on displayed goods with new grading energy labels in the week before 25 November 2015.
3. The prefix "U1" will be added in front of the reference number of the new grading energy label while the other format will remain unchanged. For example:

Product	Existing Grading Standard Reference Number	New Grading Standard Reference Number
Room Air Conditioner	C080123	U1-C080123
Refrigerating Appliance	R080123	U1-R080123
Washing Machine	W080123	U1-W080123

Details on the upgrading of energy efficiency grading are available at Energy Label Net of EMSD (<http://www.energylabel.emsd.gov.hk>).

Guidance Notes on Liquefied Petroleum Gas Storage Installations

What are Liquefied Petroleum Gas (LPG) storage installations?

An LPG storage installation is an installation storing LPG with an aggregate nominal water capacity of more than 130 litres. LPG is normally supplied to consumers by way of pipelines from the store. LPG storage installations include supply pipelines, vaporisers and pressure-regulating installations, etc. In general, there are three types of LPG storage installations:

- LPG compounds installed with bulk tanks
- Piped-cylinder stores
- Stand-by cylinder stores

What are the duties of an owner?

Regulation 6B of the Gas Safety (Gas Supply) Regulations stipulates that the owner of a notifiable gas installation (e.g. an LPG storage installation) should maintain and operate the installation in a safe condition for the prevention of fire, explosion or other danger arising from the installation.

Regulation 6C of the Gas Safety (Gas Supply) Regulations requires the owner to ensure that the LPG storage installation is inspected by a competent person not less than once every year to ascertain that the installation is maintained and operated in accordance with Regulation 6B. An inspection report (Form 109) should be compiled and the owner should submit a copy of the report to the Gas Authority within four weeks after each inspection. Failure to carry out the above inspection before the due date and/or failure to submit a copy of the inspection report in a timely manner is an offence under the law and the owner may be liable to prosecution.

To fulfil the above duties, the owner should:

- Arrange a competent person to conduct statutory inspections not less than once every year. The owner should have rectified all irregularities found during routine inspections before the statutory inspection; otherwise he or she may be considered as contravening Regulation 6B;
- Rectify any irregularities or near misses found in the installation and its surrounding area as soon as possible;
- Keep full records of construction and use approvals granted by the Gas Authority;
- Maintain full records of inspection, maintenance and alteration works carried out on the installation;
- Ensure that the LPG cylinders, where applicable, are kept secured in position;



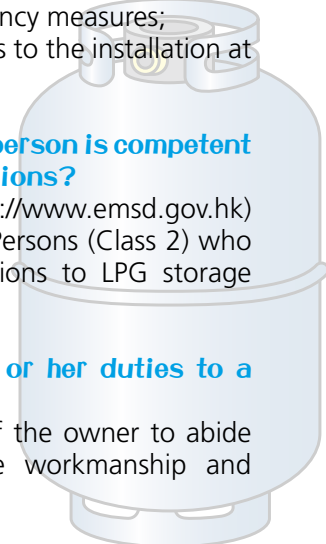
- Ensure that only persons with suitable training and competency are allowed to work on the installation;
- Keep the installation clear of weeds and debris, practice good housekeeping;
- Ensure the security of the installation, entrance gates should be securely locked;
- Keep vehicles at suitable safety distance away from the installation, except for road tanker or cylinder wagon during gas delivery;
- Ensure that all the operating staff are fully conversant with the procedures in operating the installation and the emergency measures;
- Conduct routine inspections to the installation at regular intervals.

How can the owner know if a person is competent to conduct statutory inspections?

The EMSD website (<http://www.emsd.gov.hk>) maintains a list of Competent Persons (Class 2) who may conduct statutory inspections to LPG storage installations.

Can the owner delegate his or her duties to a contractor?

No. It is the responsibility of the owner to abide by the law and monitor the workmanship and performance of the contractor.



Continuing Professional Development Scheme for Registered Electrical Workers

Newly Added Modes of Training

Starting from 1 January 2015, in addition to the original training modes, the Continuing Professional Development (CPD) training for Registered Electrical Workers (REWs) may also be completed through one of the following newly added options:

- (1) REWs who have taken or are taking academic courses related to electrical engineering recognised by the Electrical and Mechanical Services Department and organised by training organisations such as local universities, Hong Kong Institute of Vocational Education, Vocational Training Council, etc. within the three-year period before the expiry date of the current registration certificate are regarded as having completed CPD training covering the two training modules.
- (2) REWs who have become members in the electrical or building services discipline of some of the professional bodies in the engineering sector and have completed the mandatory continuing professional training required for their respective professional membership within the three-year period before the expiry date of



the current registration certificate are regarded as having satisfied the CPD training requirement for REWs

For details of the CPD Scheme, please visit EMSD website at www.emsd.gov.hk ("Protecting Public Safety" → "Electricity" → "CPD Scheme for REW").

Guidance Notes on Electrical Work

The Electricity Ordinance stipulates that no person shall employ a person other than a registered electrical contractor to carry out electrical work. Electrical work must be carried out by a registered electrical worker or a person under the supervision of a registered electrical worker. The Electricity (Wiring) Regulations under the Electricity Ordinance also stipulates that a fixed electrical installation should, after completion of the electrical work (including repair, alteration or addition) and before it is energised for use, be inspected, tested and certified by a registered electrical worker to confirm that the requirements of the said Ordinance have been met. Therefore, the owner of the fixed electrical installation may obtain the certificate (i.e. Form WR1) from the concerned registered electrical contractor upon completion of the work.

You may visit EMSD website at www.emsd.gov.hk ("Protecting Public Safety" → "Electricity" → "Registers" → "Registered Electrical Contractors" or "Registered Electrical Workers") to search for a suitable registered electrical contractor and check whether the worker is a registered electrical worker.



E & M Safety Quiz

Please fill in the reply slip below with **the most appropriate answers** and send it by post or by fax to the Editor, E&M Safety Newsletter (contact information is shown at the bottom of this page). The first 500^[1] of the quiz participants answering all questions correctly will receive a souvenir (on a first-come-first-served basis).

- What should we pay attention to with regard to safety while using kiddie rides?**
 - Stay out of the fenced area while the ride is in motion
 - Sit on the designated seat of the ride
 - Do not overload the ride
 - All of the above
- When considering modernising an old lift, which one of the following is not an enhancement solution recommended by EMSD?**
 - Install a double brake system
 - Install an unintended car movement protection device for the brake system
 - Beautify the lift car interior with decorations
 - Install an ascending car overspeed protection device
- Which of the following is incorrect when using window type air conditioners?**
 - Clean the filters regularly
 - No time lag required between switching off and switching on
 - A newly installed air conditioner must first be inspected by a registered electrical contractor before connecting to fixed power supply
 - Excessive vibration is an abnormality
- The new upgraded energy efficiency grading standards will be fully implemented from 25 November 2015. Which of the following three types of prescribed electrical products will be included in the new grading standards?**
 - Compact fluorescent lamps, washing machines and dehumidifiers
 - Room air conditioners, refrigerating appliances and compact fluorescent lamps
 - Room air conditioners, refrigerating appliances and dehumidifiers
 - Room air conditioners, refrigerating appliances and washing machines
- For LPG storage installations with an aggregate nominal water capacity of more than 130 litres, how often should the owners arrange a competent person to conduct an inspection to the installations?**
 - Once every 6 months
 - Not less than once every year
 - Once every 18 months
 - Not less than once every 18 months
- Within what time period should the owner submit a copy of the inspection report of the LPG storage installation to the Gas Authority upon completion of the annual inspection by a competent person?**
 - Within 10 days
 - Within 14 days
 - Within 2 weeks
 - Within 4 weeks

REPLY SLIP ^[2]					
Name:			Tel.:		
Hong Kong Address:					
Answers:					
Q1	Q2	Q3	Q4	Q5	Q6
Where did you get this E&M Safety Newsletter?					
Residential estate	School	District Office	New immigrant centre		
Others (please specify):					

[1] Only the first 500 of the quiz participants sending in the Reply Slip with all answers correct will be notified.

[2] The personal data provided in the Reply Slip will only be used for the E & M Safety Quiz purpose. It will be kept confidential and will not be disclosed to any third party. You have the right to request in writing to check whether EMSD is keeping your personal data, to access or correct it, and to enquire about our policy and procedures in the use of such data as well as the types of personal data we are keeping. The above terms do not affect your rights as set out in the Personal Data (Privacy) Ordinance.

Answers to last issue's quiz: 1.C 2.A 3.D 4.A 5.C 6.D

Feedback

Your comments and suggestions, whether on editorial style or contents, are most welcome. Tell us how we can improve and make the E & M Safety Newsletter a truly informative and interesting publication for you. Please contact us if you have any comments or enquiries, or need a printed copy. Both the English and Chinese versions of the E&M Safety Newsletter are available on our website at <http://www.emsd.gov.hk>.

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