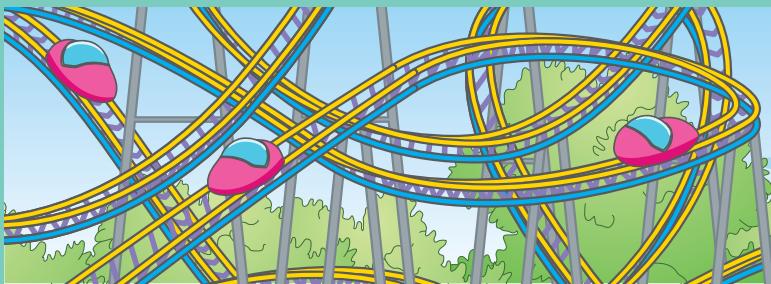


### Proper Use and Maintenance of Flexible Gas Tubing



### Stay Within Your Limits - Have a Safe Ride



1. Install a double brake system



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



4. Install an advanced car door mechanical locks and door safety edges



3. Install an ascending car overspeed protection device



5. Add an intercom and CCTV system



6. Install an obstruction switch to protect the suspension ropes



7. Add automatic rescue devices

### Modernising Old Lifts

Points to Note on Safe Use of **Electric Water Heaters**

Points to Note on Safe Use of **TV Sets**

Full Implementation of the **Buildings Energy Efficiency Ordinance (BEEO)** on 21 September 2012

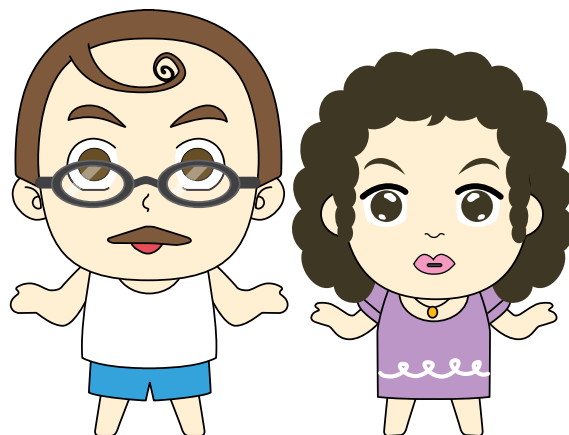


## Editor's Notes

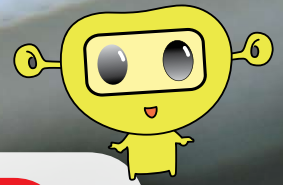
Hello everyone. You will find in this issue of E&M Safety Newsletter information on the proper use and maintenance of flexible gas tubing, the safe use of electric water heaters and TV sets, as well as the periodic inspection, testing, certification and maintenance work for electrical installations. We also offer some safety tips on the use of amusement rides, ways to modernise existing lifts and an introduction to the Buildings Energy Efficiency Ordinance which was fully implemented on 21 September 2012. With the summer vacation just around the corner, we wish you a safe and joyous holiday.

# Proper Use and Maintenance of Flexible Gas Tubing

**G**as users should pay attention to gas safety when using flexible gas tubing. It is important that they should buy the flexible gas tubing approved by the Electrical and Mechanical Services Department and bearing the "EMSD APPROVAL" mark. Compliant flexible gas tubing should bear the "機電工程署批准 EMSD APPROVAL GTXXXX" mark (XXXX represents the approval number) and also the service life expiry date. Moreover, the flexible gas tubing must be installed and tested by registered gas installers employed by registered gas contractors before it can be used.

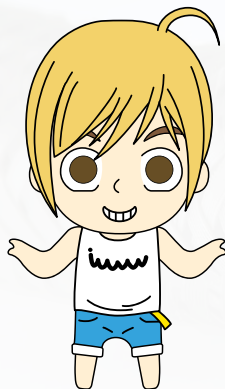


# When using flexible gas tubing,



## gas users should

- ✓ use the flexible gas tubing that is approved by the Electrical and Mechanical Services Department and bearing the "EMSD APPROVAL" mark for connection to a gas appliance;
- ✓ check whether the flexible gas tubing is damaged or has reached the end of its service life (please check the expiry date on the tubing), and whether the gas tubing connection joint has loosened. If any defects are found, arrange a registered gas contractor to replace or repair the flexible gas tubing at once;
- ✓ pay attention to the type of flexible gas tubing that is installed, record the expiry date of service life and arrange replacement before the expiry date;
- ✓ clean the grease on the burner and the trivet regularly and also keep the flexible gas tubing clean;
- ✓ arrange a registered gas contractor to conduct safety checks on all gas installations at least once every 18 months.



## gas users should not

- ✗ use the flexible gas tubing which does not bear the "EMSD APPROVAL" mark for connection to a gas appliance;
- ✗ use the flexible gas tubing which is damaged, or has shown signs of material aging or cracking;
- ✗ use the flexible gas tubing that has reached the end of its service life;
- ✗ install and use rubber flexible gas tubing which is longer than 2 metres;
- ✗ install the flexible gas tubing by themselves;
- ✗ use the flexible gas tubing that is overly twisted or placed near a heat source for a prolonged period of time;
- ✗ use the flexible gas tubing with loosened connection joint;
- ✗ place or install the flexible gas tubing too close to the ignition source;
- ✗ allow children to come into contact with the flexible gas tubing.



# Modernising Old Lifts



In the 17th issue of the E&M Safety Newsletter, we introduced the first four modernisation solutions for old lifts mentioned in the promotion booklet "Guidelines for Modernising Existing Lifts" by EMSD. These involve the installation of, namely, a double brake system, an unintended car movement protection device, an ascending car overspeed protection device, and a car door mechanical lock and door safety edge. In this issue, we continue with the remaining three solutions.

## Add an Intercom and CCTV System

If trapped in a lift, passengers can always press the alarm bell for help, but according to experience, that is not the best way to seek help. Installing an intercom system makes it possible for trapped passengers to communicate directly with management office staff who can take speedy action to call Fire Services Department and the lift contractor. Some advanced intercom systems also allow passengers to directly contact the 24-hour call centre of the registered lift contractor for assistance. Responsible persons of lifts may also consider installing a closed-circuit television (CCTV) system which comprises a camera in the lift car and an emergency alarm push button with buzzer (or alarm bell), all connected to the building management office. Management office staff can monitor the CCTV video recorded round the clock and take speedy action during emergency.



1. Install a double brake system



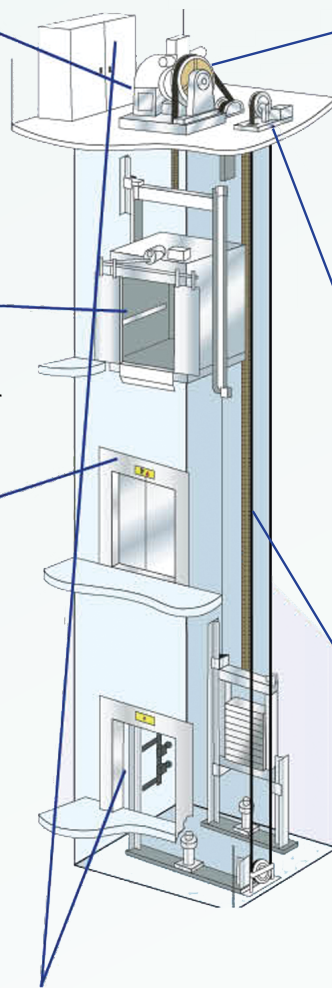
4. Install an advanced car door mechanical locks and door safety edges



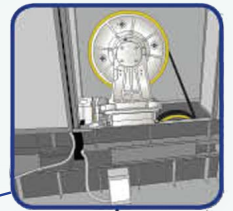
5. Add an intercom and CCTV system



5. Add an intercom and CCTV system



7. Add automatic rescue devices



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

## Install an Obstruction Switch to Protect the Suspension Ropes

Excessive wear and tear of suspension ropes is a major cause of rope breakages. The installation of an obstruction switch can prevent the excessive wear and tear of the

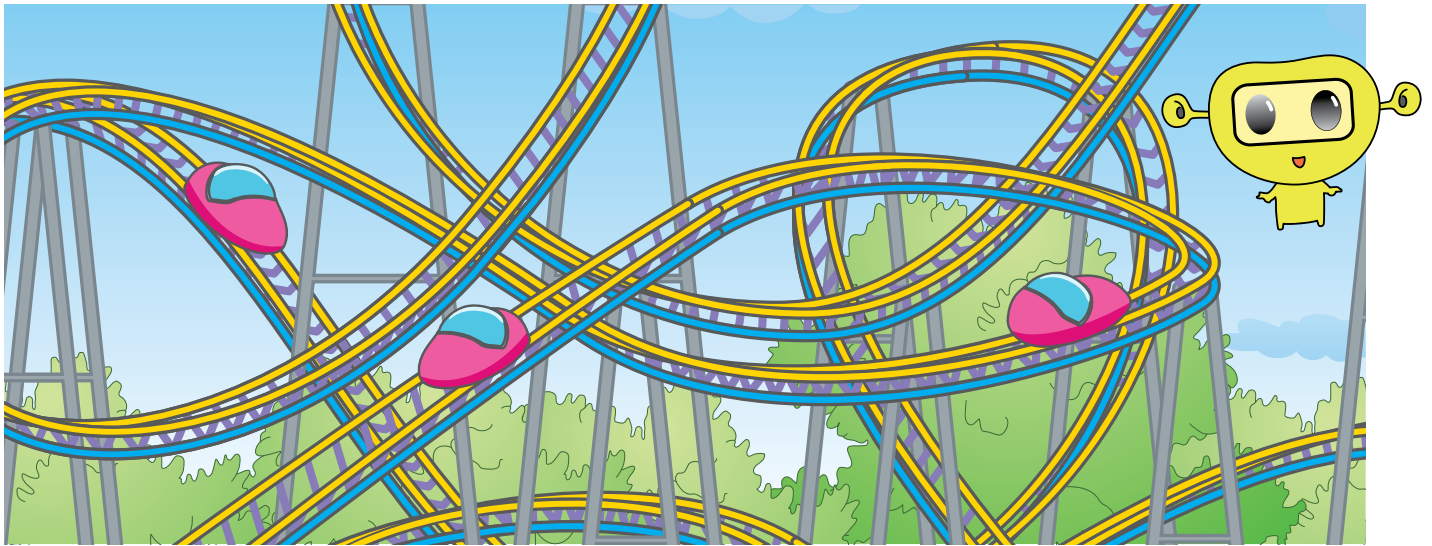
suspension ropes and sheaves during breakdown, which can happen when the movement of the lift car or counterweight is obstructed while the motor is still in operation.

### Add Automatic Rescue Devices

Passengers may be trapped inside a lift car in case of power failure. An advanced automatic rescue device, if installed, can maintain the lift in momentary operation

for the safe exit of passengers, and prevent them from being trapped. When normal power supply fails, the device will detect the voltage dip and make use of the back-up battery power to drive the lift to the nearest landing floor, and open the lift doors at the correct position to release the passengers. After that, the lift will remain out of service until normal power supply is resumed.

## Stay Within Your Limits - Have a Safe Ride



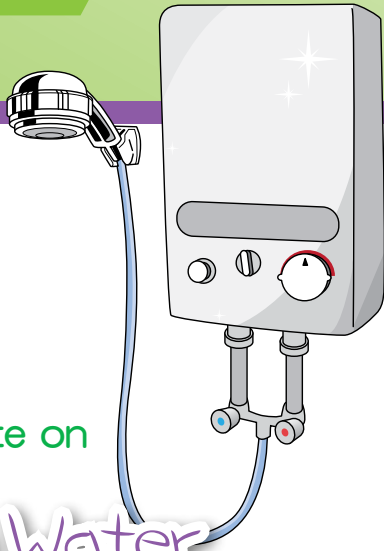
**T**here are different kinds of amusement rides in Hong Kong, but they are by no means designed for use by everyone. When choosing the right amusement ride for ourselves, we should give due consideration to our health conditions and physical strength.

Users must pay particular attention to and observe any height and weight restrictions. The rides are normally equipped with seats of fixed dimensions and relevant safety features such as seat belts. Users therefore should be of the right physical size in order to be seated and wear the safety equipment and enjoy full protection during the ride.

Users should also familiarise themselves with the nature of the amusement rides. Some rides such as roller-coasters are more challenging. Users should ensure that they are mentally and physically fit for the ride. If in doubt or terrified, one should not try it. Moreover, we should not

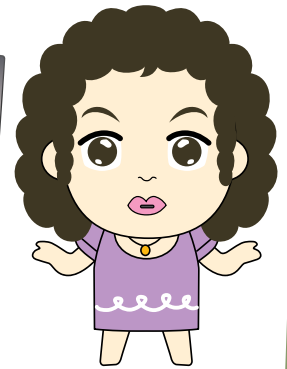
force anyone to get on a ride against his/her will. Some rides are more physically demanding, so users should take a break after the ride to avoid over exhaustion. They must also drink water every now and then to replenish. If they feel uncomfortable, they should notify the ride attendant in order to get appropriate treatment.

Due to difference in physical strength, extra attention must be noted in choosing the rides for children, the elderly and the disabled. Pregnant women, or people who are on medication or have consumed alcohol must not take the amusement rides. The same goes for those who have undergone surgery, or who have health conditions such as high blood pressure, a heart condition, or neck or back problems. When in doubt, consult a doctor or abstain from the ride altogether.



## Points to Note on Safe Use of Electric Water Heaters

- ☞ The commonly used household electric water heaters include instantaneous type, shower type (also known as low-pressure storage type or open type) and unvented thermal storage type (also known as high-pressure storage type) electric water heaters.
- ☞ Carefully read and understand the instructions in the user's manual, and keep the manual for future reference.
- ☞ The installation and alteration of electric water heaters must be carried out by registered electrical contractors and licensed plumbers. Do not carry out the installation or alteration by yourself.
- ☞ The water outlet of a shower type electric water heater must remain unblocked. Under normal operation, a small amount of steam or hot water may come out from the showerhead. Do not install an on/off control valve at the water outlet or connect the outlet to a basin or bath tub. This is to avoid blocking the water outlet which may cause excessive high pressure to build up inside the tank and result in an accident.
- ☞ The water storage tank of an unvented thermal storage type electric water heater may withstand a certain degree of high pressure. An electric water heater of this type must be fitted with a temperature and pressure relief valve in addition to a thermostat and a thermal cutout.
- ☞ If any abnormality is observed, stop using the electric water heater and switch off the power immediately, and arrange for inspection and repair by the supplier.
- ☞ Switch off the electric water heater after use.
- ☞ Arrange for an experienced technician to inspect and maintain the electric water heater regularly.



## Points to Note on Safe Use of TV Sets

- ☞ Ensure that the TV is placed where there is sufficient space for heat dissipation. To prevent overheating and fire hazards, do not cover the TV.
- ☞ Regularly remove the accumulated dust on the TV frame, including the heat dissipation louvre. Unplug the TV before cleaning.
- ☞ The TV should be placed on a flat and stable surface.
- ☞ If you want to install your LCD TV on the wall, make sure the mount is securely fixed on the wall and is stable enough to support the weight of the TV.
- ☞ To prevent accidents, do not subject the power cord and the signal cord to excessive bending or twisting.
- ☞ To ensure safety, turn off the TV by pressing the power button on the TV set rather than using the remote control device, especially when the TV will not be in use for a long period or when you are leaving home.
- ☞ Contact the supplier if you have any questions about the settings. Do not let a TV operate for long periods under inappropriate settings for this can affect the lifespan of the components.
- ☞ If your TV is out of order, contact the supplier and make arrangements for inspection and repair to ensure safety.

## Periodic Inspection and Testing and Regular Maintenance of Electrical Installations

To prevent electrical accidents and to ensure the safety of building occupants and users, the law requires that owners of communal fixed electrical installations (including individual flat owners and owners' corporation) in a building with an approved loading exceeding 100A should have these installations inspected, tested and certified by a

registered electrical contractor (REC) at least once every five years. When carrying out the periodic inspection, testing and certification (PITC) work, owners of these installations should work closely with the REC to work out a power suspension arrangement and provisional measures for the operational needs of the building in order to protect the

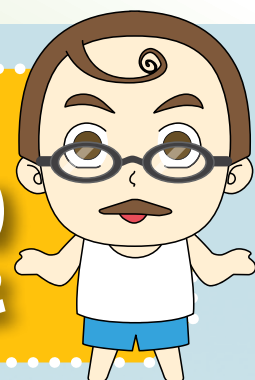
safety of the electrical workers and minimise the impact of the PITC work on building users.

In addition, various forms of assistance are currently provided by government departments to further facilitate installation owners to arrange and complete the periodic inspection and testing of their electrical installations. For example, the District Offices assist flat owners in setting up owners' corporation, the Buildings Department, the Hong Kong Housing Society and the Urban Renewal Authority provide financial support through building maintenance assistance schemes, and EMSD provides technical advice.

Apart from the periodic inspection and testing mentioned above, all electrical installations should be properly and regularly maintained to prevent electrical accidents and to maintain a reliable power supply.

Information about the RECs may be downloaded from the following EMSD website: <http://www.emsd.gov.hk> > Protecting Public Safety > Electricity > Registers > Registered Electrical Contractors > enter the district (e.g. Sha Tin, Sham Shui Po) in the "District" box and click the "Search" button

For any enquiries on the above, please contact EMSD at 1823.



## Full Implementation of the Buildings Energy Efficiency Ordinance (BEEO) on 21 September 2012

Under BEEO, four key types of building services installations (i.e., air-conditioning installations, lighting installations, electrical installations as well as lift and escalator installations) for newly constructed buildings and "major retrofitting works" are required to comply with the minimum energy efficiency standards. In addition, energy audits for central building services installations shall be carried out in commercial buildings every 10 years.

### Coverage

BEEO applies to various prescribed buildings, including commercial buildings, hotels and guesthouses, schools, community buildings, government buildings, common areas of residential buildings and industrial buildings.

### Newly constructed buildings

Developers have to submit a stage one declaration and a stage two declaration to the Director of Electrical and Mechanical Services separately in applying for the Certificate of Compliance Registration (COCR). Both declarations must be certified by a Registered Energy Assessor (REA). Building owners subsequently are required to apply for the renewal of the COCR once every ten years.

### Major retrofitting works

When "major retrofitting works" are carried out in a unit or in the common area, the responsible person (e.g. the owner or tenant) shall obtain a Form of Compliance from



Relevant publications can be downloaded from the website of BEEO

the REA to certify that the requirements of the latest version of Building Energy Code are complied with.

### Energy audits

Owners of commercial buildings and commercial portions of composite buildings are required to engage REAs to conduct energy audits for the central building services installations in accordance with the Code of Practice for Building Energy Audit once every ten years. The Energy Audit Form shall be exhibited in a conspicuous position at the main entrance of the building.

For details, please visit the website of BEEO ([www.beeo.emsd.gov.hk](http://www.beeo.emsd.gov.hk)).

## 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 of the quiz participants<sup>[1]</sup> answering all questions correctly will receive a souvenir.

- Which of the following should gas users refrain from doing when using flexible gas tubing?**
  - Install the gas tubing by themselves
  - Regularly clean the grease off the burner and the trivet so as to keep the flexible gas tubing clean
  - Place or install the flexible gas tubing too close to the ignition source
  - Use the flexible gas tubing that is approved by the Electrical and Mechanical Services Department and bearing the "EMSD APPROVAL" mark for connection to a gas appliance

A. I and II    B. I and III  
C. II and III    D. III and IV
- Which of the following is the correct format of the approval mark for flexible gas tubing?**

A. 氣體GAS XXXX  
B. 機電工程署批准  
EMSD APPROVAL GTXXXX  
C. 批准軟喉Approved Tubing XXXX  
D. 政府批准Approved by Government XXXX
- Which of the following is not a modernisation solution for old lifts as recommended by EMSD?**

A. Add an intercom and CCTV system  
B. Install an obstruction switch to protect the suspension ropes  
C. Add automatic rescue devices  
D. Install an air conditioner inside the lift car
- You are already seated in the roller-coaster when you suddenly become terrified. What should you do?**

A. Make your friend or family stay with you and continue through the ride.  
B. Unfasten the seatbelt yourself and get off.  
C. Raise your hand and signal to the ride attendants that you do not want to take the ride, and leave the roller-coaster with their assistance.  
D. Shut your eyes and continue through the ride.
- The water outlet of one of the following types of electric water heaters must not be installed with an on/off control valve nor may that water outlet be connected to a basin or bath tub. Please identify which.**

A. Instantaneous electric water heater  
B. Shower type electric water heater  
C. Unvented thermal storage type electric water heater  
D. Instantaneous electric water heater and unvented thermal storage type electric water heater
- Which of the following statements is incorrect in regard to the energy audits conducted under the Buildings Energy Efficiency Ordinance?**

A. Energy audits shall be carried out in commercial buildings and commercial portions of composite buildings.  
B. Energy audits shall be carried out every year.  
C. Energy audits shall be conducted for central building services installations in accordance with the Code of Practice for Building Energy Audit.  
D. Energy Audit Form shall be exhibited in a conspicuous position at the main entrance of the building.

REPLY SLIP <sup>[2]</sup>						
Name:				Tel.:		
Hong Kong Address:						
Answers:						
Q1	Q2	Q3	Q4	Q5	Q6	
Where did you get this <i>E&amp;M Safety Newsletter</i> ?						
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.B 2.B 3.A 4.D 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. Both the English and Chinese versions of the E&M Safety Newsletter are available on our website at <http://www.emsd.gov.hk>. Please contact us should you need a printed copy.

The Editor, E&M Safety Newsletter  
Electrical and Mechanical Services Department  
3 Kai Shing Street, Kowloon Bay

Tel. 電話：1823 (電話中心 Call Centre)  
Fax 傳真：2504 5970  
Email 電郵：info@emsd.gov.hk

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