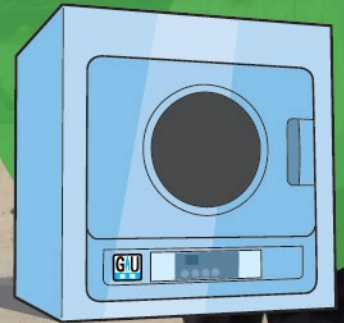


Behind the Olympic Flame



Safe Use of Domestic Gas Dryers



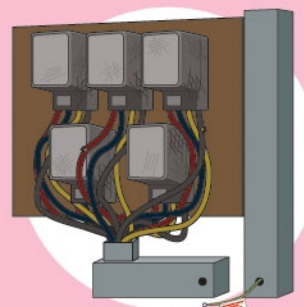
Safety Tips on Escalators



Points to Note When Using Electric Heaters and Electric Blankets

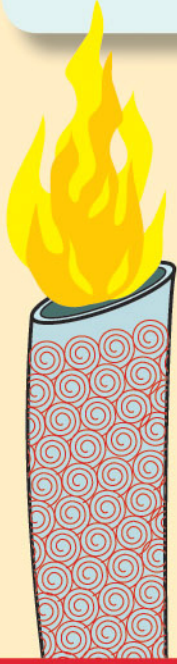


Responsibilities of Owners of Electrical Installations



Editor's Note

This is the 10th issue of the E & M Safety Newsletter, and we would like to express our heartfelt thanks for your continuous support. You will find in this issue a special feature "Behind the Olympic Flame" which we believe makes this newsletter richer and more interesting. You will also find ample E & M safety tips on electric blankets, electric heaters, gas dryers and escalators, as well as details of the responsibilities of owners of electrical installations. Do read the newsletter in detail and note the safety messages.



Behind the Olympic Flame



The Role of Gaseous Fuels in Producing Special Pyrotechnics Effects

The Beijing Olympics concluded successfully, with China winning 51 gold medals. One of the much talked about highlights of the Beijing Olympics was the moment when Li Ning, the "prince of gymnastics", lit the Olympic cauldron in the opening ceremony. Hong Kong, a sophisticated city despite its small size, was chosen as one of the co-host cities of the Beijing Olympics, which is something that all Hong Kong people should be proud of. Indeed, when the Olympic Equestrian Events were held in Hong Kong several months ago, the same Olympic Flame which symbolised the Olympic spirit also burnt in Hong Kong at the events venue.

Liquefied petroleum gas (LPG) and town gas are the most common gaseous fuels used in Hong Kong. In our daily lives, cooking, bathing and even the generation of electricity depend on gaseous fuels. In fact, gaseous fuels also play an important role in producing special effects in films and festivities. LPG was used to fuel the dazzling Olympic Flame from the Olympic Torch for the Olympic Equestrian Events.



Vaporiser and Gas Main

Technical Requirements of the Olympic Flame

Preparations for the Olympic Flame started at the LPG cylinder store. To give the Olympic Flame the gold colour as in a natural flame, the engineers used LPG which has a higher carbon content as fuel for the Torch to achieve that colouring effect. LPG was first vaporised by the vaporiser, then transmitted at a pressure of 70 kPa through pipes to the valve control room, where the LPG pressure would be regulated again. The LPG was then divided into two parts. One part would be supplied to the main burner of the Torch, while the other part supplied to the pilot burners for igniting the Olympic Flame in the main burner. The valve control room had numerous pressure sensing valves. When the pressure of the gas was at an abnormal level, gas supply would be cut off immediately. All regulators and related installations were installed in metal boxes for mechanical protection.



LPG Cylinder Store

In addition, two air blowers were installed in the valve control room to provide sufficient air to the pilot burners through pipes, in order to ensure that the LPG in the pilot burners underwent complete combustion and no carbon was accumulated. The LPG, the pressure of which was regulated by the regulator to various degrees, was then transmitted to the tailor-made main burner. The main burner was ignited by two pilot burners which burnt continuously to ensure that the LPG in the main burner was successfully ignited and would not disperse with the wind. Each pilot burner had an independent flame monitoring system to monitor and control the flame to ensure that the pilot burner would burn continuously. Inside the Torch was an air blower which blew upwards to move the air around the main burner. Apart from cooling down different parts in the Torch, it also created the visual effect of an Olympic Flame mildly flickering upwards in the wind.

The Olympic Flame, a sacred symbol of the Olympic Games, must keep burning non-stop day and night. To meet this strict requirement, we must solve a management problem, and that was to ensure a steady supply of LPG. Apart from the basic LPG store, the venue also provided an auxiliary LPG store in the venue to provide back-up LPG supply. The Torch was specially designed so that it had two levels of burning capacity. When no competition was held, the burning capacity was kept at a low level to reduce gas consumption. The gas consumed during these periods was only 60% of that during competitions. Various arrangements such as the timing of gas deliveries, the quantity of LPG cylinders stored and the routes of the LPG cylinder wagons were all carefully planned so as to strike a balance between gas safety and the need for a steady supply of gas.



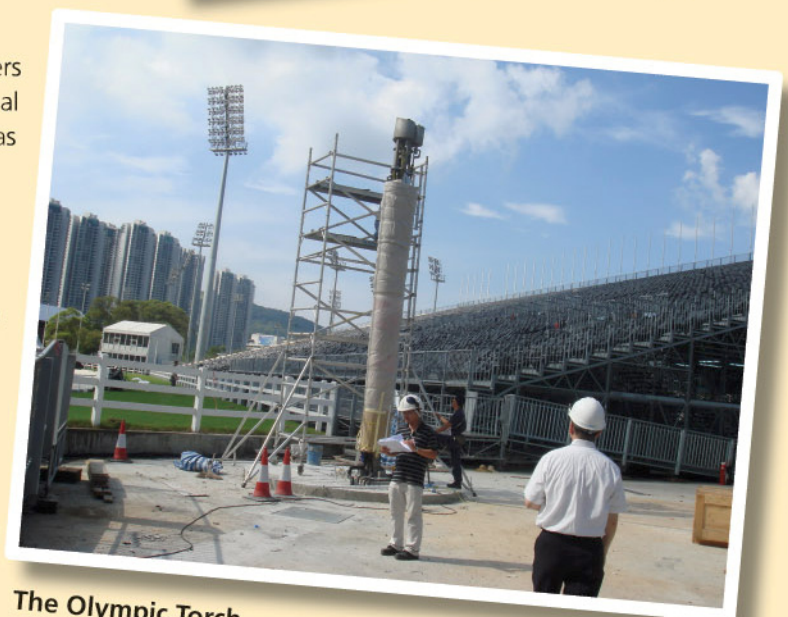
Vaporiser

Other Safety Considerations

In addition to proper emergency procedures, the controllers also monitored the system 24 hours a day to ensure normal operation. The LPG cylinder store was also checked with gas detectors every hour to prevent gas leakage.

Heroes Behind the Scene

In our daily lives, a flame comes by easily just at the press of a button on the gas appliance. Yet, for that small flame, staff of the law enforcement department and gas utilities have performed their duties and done a lot of work to ensure gas safety. The same is true of the grand Olympic Flame, for which the relevant staff had to put in a lot of efforts. Behind the glamour of the Olympic Games opening ceremony and the medal-winning athletes was in fact a lot of hard work by the athletes and numerous staff behind the scenes, without which the glamour and success would not have been possible.



The Olympic Torch

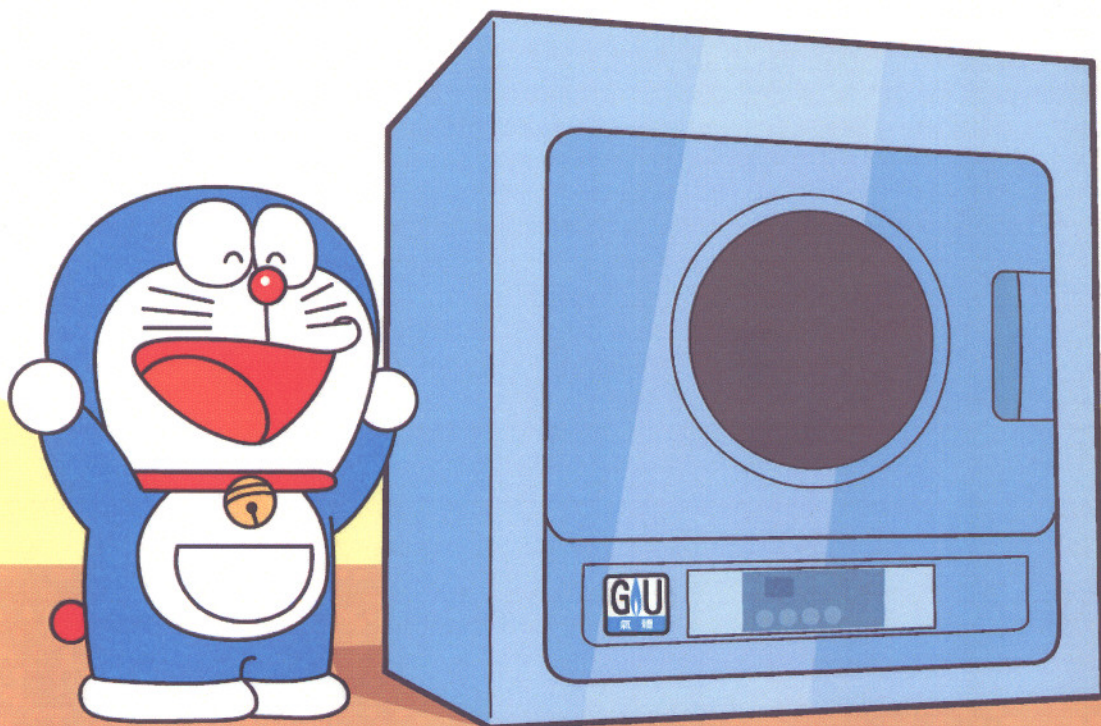
Safe Use of Domestic Gas Dryers

Gas dryers, being domestic gas appliances, are also subject to the approval of the Electrical and Mechanical Services Department (EMSD). Approved models of domestic gas appliances bear a GU mark, which signifies that such models have been produced in accordance with recognised international safety standards and have passed the local quality assurance tests. As such, the public should purchase gas dryers bearing the GU mark to ensure gas safety.

For safety reasons and for the effective performance of gas dryers, consumers should follow the instructions given by gas appliance manufacturers when using the dryers. When gas dryers are used, windows must be opened or exhaust fans switched on to maintain good ventilation and to supply adequate air for combustion. Odds and ends or flammable objects should not be placed near gas dryers to avoid obstruction of exhaust outflow. In addition, the filters should be cleaned after each load is dried to avoid accumulation of dust and synthetic fibres, which may affect the performance of the dryers.

Consumers should employ registered gas contractors to install gas dryers in accordance with the technical guidelines provided by the manufacturers. The exhaust outlet of a dryer should be free from obstruction and the exhaust pipe must exhaust to outside air directly. The exhaust pipe should preferably be made of hard galvanized sheet steel and should be as short as possible. The number of bends and the length of the exhaust pipe should be kept to a minimum so that the venting of the exhaust will not be hindered. Remove all articles, especially cigarette lighters, from pockets before loading a dryer to prevent damage to it. Do not put too much clothing or dripping clothes into a dryer to avoid overloading. The drying time should not be too long. Flammable clothing, such as delicate underwear, clothing made of synthetic fibres or stained with oil and dry-cleaning agent should not be dried in a dryer to avoid combustion of the fabrics leading to a fire.

For enquiries on the installation or safe use of a gas dryer, please call the government hotline 1823.



Safety Tips on Escalators



Hold the handrail to keep your balance.



Do not use the escalator when carrying bulky luggage or a pram. Escalator steps are not designed to accommodate bulky luggage or prams. Use a lift instead to avoid accidents.



Do not walk or run on an escalator to avoid losing balance and falling.



Take care of the elderly and children and hold them securely.



Do not lean beyond the escalator to avoid bumping into adjacent objects or getting trapped in the corner space.



If you feel unwell or are physically unfit to use an escalator, use a lift instead to prevent accidents.

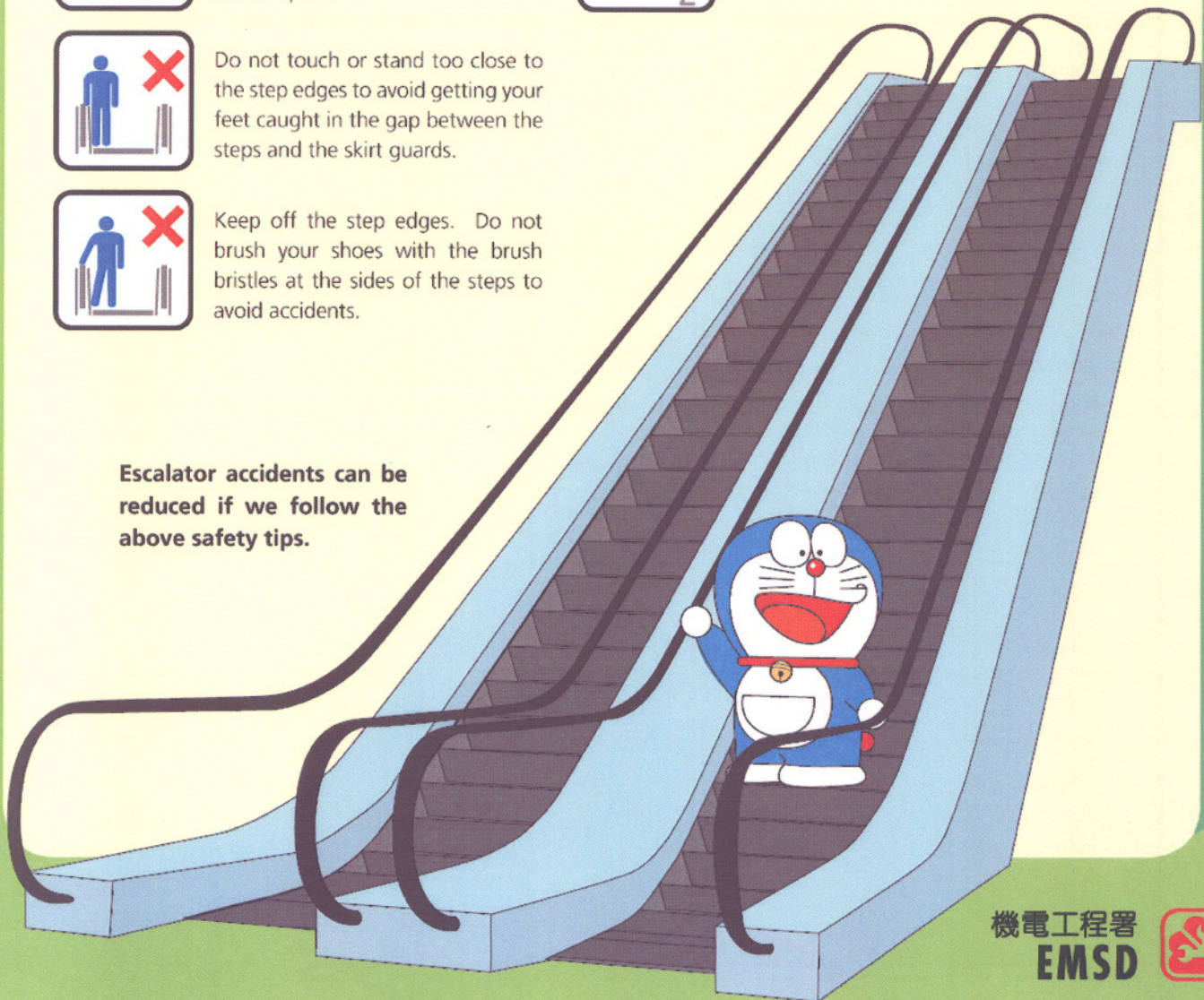


Do not touch or stand too close to the step edges to avoid getting your feet caught in the gap between the steps and the skirt guards.



Keep off the step edges. Do not brush your shoes with the brush bristles at the sides of the steps to avoid accidents.

Escalator accidents can be reduced if we follow the above safety tips.



Points to Note When Using

Electric Heaters and Electric Blankets

On a chilly night, Nobita switched on the electric heater and the electric blanket and was about to sleep. At this point...



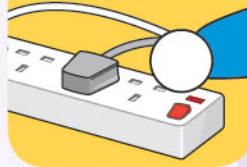
"Then why did you turn off my electric blanket too?"

"Your electric blanket is also dangerous!"



Doraemon entered the bedroom, and was shocked by what he saw. He rushed to the extension unit and turned off the power switch of the electric heater as well as the electric blanket. He said:

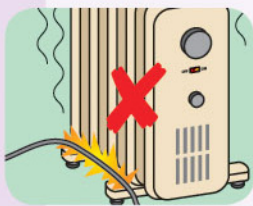
Turn off the power switch.



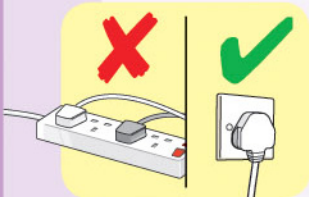
"Nobita, the way you use the electric heater is really dangerous:



You should not place the electric heater by the bedside or near any combustible objects because the heat will set these objects on fire.



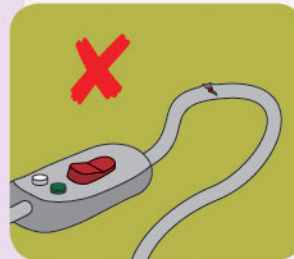
Moreover, you should not place an operating electric heater near the power cord because this would cause damage to the insulating material of the power cord, which may result in a short circuit or fire.



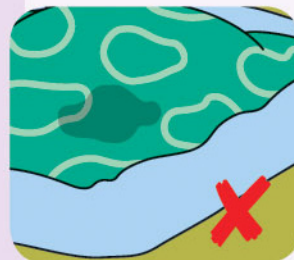
An electric heater is an electrical appliance with high power consumption. It should use a single socket and avoid sharing the same extension unit with other electrical appliances.



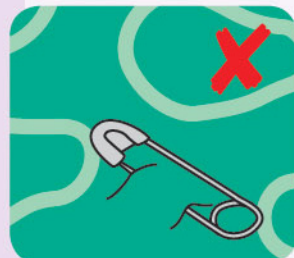
For safety sake, check for any damage before use."



You should check for any damage before use. Look, the power cord of this blanket is damaged.



There will be a danger of an electric shock if you use an electric blanket that is wet.



Never pierce the electric blanket with safety pins or other sharp objects to avoid touching the live parts.

Besides, electric blankets are not suitable for infants and persons incapable of self-care or are insensitive to heat."

Here Comes Christmas Again!

Reminders from Doraemon

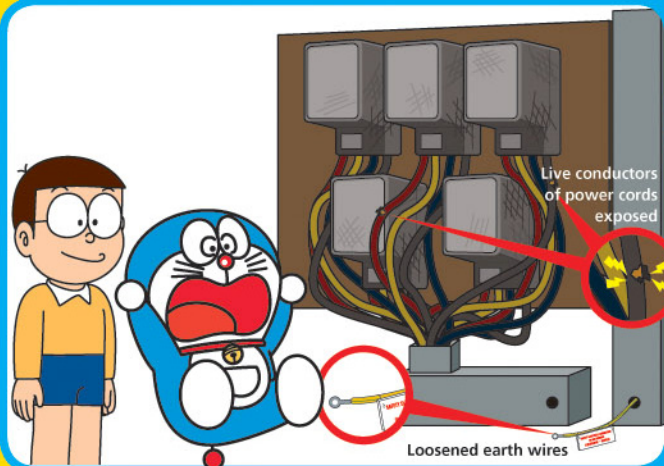
Safety Tips for Christmas Lighting

- ⚡ Check for any damage before use.
- ⚡ Do not use Christmas lighting fitted with 2-pin plugs or with damaged power cords.
- ⚡ Use only those products with double or reinforced insulation, usually marked with a “回” symbol.
- ⚡ Do not use non-waterproof Christmas lighting outdoors.
- ⚡ Unplug Christmas lighting before replacing light bulbs.



Responsibilities of Owners of Electrical Installations

Doraemon and Nobita were taking a walk when they passed by a building. They found that the communal electrical installations of the building were ageing badly, with loosening earth wires and exposed live conductors of power cords.



The communal electrical installations of this building are ageing really badly. Would they pose hazards to the residents of the building?

Yes, of course. Ageing electrical installations would not only affect the stability of power supply but also pose fire and electrocution hazards to the residents and other occupiers of the building. According to legislation, owners of fixed electrical installations (including property owners, tenants, occupiers, incorporated owners and property management agents) should arrange for rectification immediately of any defects which could cause electrical accidents at their installations. Failure to do so constitutes an offence. As such, the owners of the electrical installations of this building should arrange for inspection and repair of their installations by registered electrical contractors as soon as possible.

Do owners of electrical installations have other responsibilities?

Yes, of course. It is stipulated in law that owners of communal electrical installations in ordinary buildings an approved loading exceeding 100 amperes shall have their installations inspected, tested and certified at least once every 5 years. To ensure the quality of works, it is also stipulated in law that for all electrical works (including new installation, alteration, repair, inspection or testing) carried out in Hong Kong, the owner of an electrical installation must employ a registered electrical contractor to carry out work on the installation. It is an offence if we fail to do so.

Where can I find the information on registered electrical contractors?

The information is available at the Public Enquiry Service Centres of all District Offices or the Customer Services Office of the EMSD at 3 Kai Shing Street, Kowloon Bay. The information can also be downloaded from the EMSD web page (www.emsd.gov.hk → Protecting Public Safety → Electricity → Registers).



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 (please see the bottom of this page for contact information). A souvenir will be given to the first 500 participants^[1] who submit correct answers to all questions.

- When gas dryers are used, what measures should be taken to ensure gas safety?**
 - Windows should be opened or exhaust fans switched on
 - Good indoor ventilation should be maintained
 - Odds and ends or flammable objects should not be placed near the dryers
 - All of the above
- Which of the following is the correct way to use a gas dryer?**
 - The drying time should not be too long
 - The exhaust pipe should exhaust to outside air directly
 - Follow the instructions given by the manufacturer
 - All of the above
- Which of the following is the correct way of using an escalator?**
 - Walk or run on the escalator
 - Lean beyond the escalator
 - Hold the handrail to keep your balance
 - Stand close to or touch the step edges
- What should an escalator passenger do when carrying bulky luggage or using a pram?**
 - Run up the escalator as soon as possible
 - Use a lift instead
 - Stand close to or touch the step edges
 - Run down the escalator as soon as possible
- According to the law, what should owners of electrical installations do if they find that the installations may cause electrical accidents?**
 - Ignore the situation as owners of electrical installations have no responsibility for that
 - Employ registered electrical contractors to carry out repair work immediately
 - Carry out repair work themselves
 - Cover the defective parts of the installations
- Which of the following is the correct way of using an electric heater?**
 - Continue to use a damaged electric heater
 - Allow the power cord to lie under the electric heater
 - Use a single socket for the electric heater
 - Place the electric heater near combustible objects like curtains, paper, etc.

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

[1] Only the first 500 participants sending in the Reply Slip with all correct answers 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 the 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: 1.B 2.D 3.D 4.B 5.B 6.B

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.

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