

## From the Editor

Thanks to your continued support, E&M Safety Newsletter has come to its 33rd issue with a rich variety of contents to offer, including proper arrangements for home renovation involving electrical works, safety tips for chargers and power supply installations, Guidance Notes on Household Air-conditioners Using Mildly Flammable Refrigerant and Standalone Commercial Refrigerators Using Flammable Refrigerant, using a lift when travelling with bulky item, and understanding Legionnaires' disease and good operation and maintenance practice of fresh water cooling towers. In addition to sharing the above information, we wish you a healthy and happy year ahead.

### Safety Tips for Chargers and Power Supply Units



### Proper Arrangements for Home Renovation Involving Electrical Works



### Use a Lift When Travelling with Bulky Item



### Understanding Legionnaires' Disease and Good Operation and Maintenance Practice of Fresh Water Cooling Towers



### Guidance Notes on Household Air-conditioners Using Mildly Flammable Refrigerant and Standalone Commercial Refrigerators Using Flammable Refrigerant

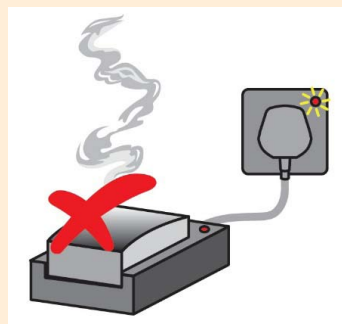
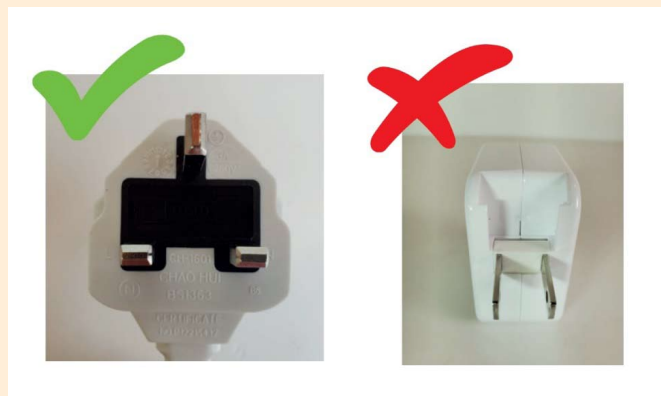


# Safety Tips for Chargers and Power Supply Units

According to the Electrical Products (Safety) Regulation, a certificate of safety compliance should be issued in respect of household electrical products to be supplied in Hong Kong, including chargers and power supply units, so as to certify that the products comply with the relevant international safety standards or other equivalent safety standards. When purchasing and using chargers and power supply units, members of the public should pay attention to the following notes:



- (1) Do not purchase chargers / power supply units (including chargers / power supply units that come with an electrical product) without product information markings (such as the manufacturer's name or trade mark, product model, rated voltage, frequency and power input).
- (2) Purchase only chargers / power supply units with a three-pin plug suitable to be used in Hong Kong (i.e. a plug that complies with safety standard BS1363 or BS546).
- (6) Do not use chargers / power supply units for a prolonged period of time to prevent overheating causing the accidents.
- (7) Place chargers / power supply units in use within sight. Do not connect chargers / power supply units to the power supply for a prolonged period of time. Unplug the chargers / power supply units or switch off the power supply after use.
- (8) If the chargers / power supply units are found to be damaged, overheating or making abnormal noise / smell / vibration, stop using them immediately and unplug them.



- (3) When purchasing chargers / power supply units, check whether the products come with a certificate of safety compliance. It is the responsibility of the suppliers to verify whether the electrical products have been issued a certificate of safety compliance before procurement. For enquiries, members of the public may contact the suppliers.
- (4) Check whether the chargers / power supply units are suitable for the electrical products to be used with. Select chargers / power supply units with the appropriate power for the required current value of the output, so as to prevent safety hazards due to overloading.
- (5) Read the user manual before using the chargers / power supply units to understand how to use them properly.

To enhance public awareness of the safety of chargers / power supply units, the EMSD recently produced a new animation to disseminate through social media platforms for relevant safety tips, which cover product information markings of chargers / power supply units, appropriate three-pin plug and the certificate of safety compliance. To view the animation, please scan the QR code on the right.



For enquiries on the electrical product safety, please call the government hotline 1823 or e-mail to [info@emsd.gov.hk](mailto:info@emsd.gov.hk).

# Understanding Legionnaires' Disease and Good Operation and Maintenance Practice of Fresh Water Cooling Towers

Legionnaires' disease (LD) was first recognised in July 1976 when an outbreak occurred among delegates attending an American Legion Convention in Philadelphia, USA, in which more than 200 cases were reported and 34 people died. After medical investigations, it was identified that the responsible bacterium of the disease was previously unknown, and was subsequently given the name *Legionella pneumophila*. Patients of LD may present symptoms of fever, headache, malaise, muscle pain, cough and breathlessness, and may develop respiratory failure. According to previously reported cases, evaporative cooling towers in air-conditioning systems may cause outbreak of LD. Normal range of operation temperature of these systems is conducive to the growth of legionellae. Therefore, it is important that we maintain good operation and maintenance practice of fresh water cooling towers.



In view of the above, the EMSD has formulated a code of practice entitled "Good Operation and Maintenance Practice of Fresh Water Cooling Towers" for public

reference, which sets out guidelines on inspection and proper maintenance of components of fresh water cooling towers. With proper operation and maintenance, fresh water cooling towers can achieve better energy efficiency and operational performance, which helps ensure public health and safety and minimise nuisance to the public. For the configuration of a typical cooling tower, please refer to Figure 1. The major contents of the code of practice are as follows:

- Operation and maintenance;
- Routine inspection and preventive maintenance;
- Monitoring of cooling water quality;
- Management of fresh water cooling tower systems; and
- Responsibilities of cooling tower owners.

For details of the Good Operation and Maintenance Practice of Fresh Water Cooling Towers, please refer to the following website:

[https://www.emsd.gov.hk/filemanager/en/content\\_296/Good\\_OnM\\_Practice\\_of\\_Fresh\\_Water\\_Cooling\\_Towers\\_for\\_Air-conditioning\\_Systems.pdf](https://www.emsd.gov.hk/filemanager/en/content_296/Good_OnM_Practice_of_Fresh_Water_Cooling_Towers_for_Air-conditioning_Systems.pdf)

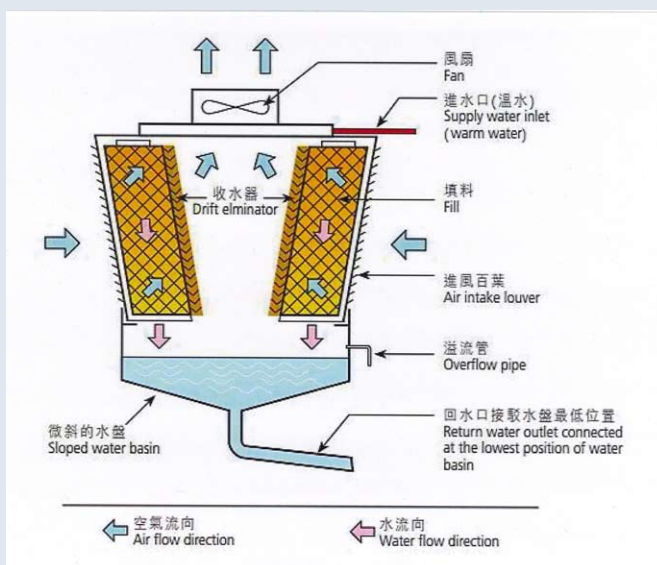


Figure 1: Configuration of a typical cooling tower



# Proper Arrangements for Home Renovation Involving Electrical Works



Home renovation often involves electrical works, including connection of power supply for household electrical appliances such as split-type air-conditioners or electric water heaters, and installation or relocation of socket outlets and lighting points, etc.

The Electricity Ordinance stipulates that no person shall employ anyone other than a registered electrical contractor to carry out electrical works. If any installation or alteration of electrical installations is involved in the renovation of a flat, the flat owner shall, irrespective of the portion of electrical works in the overall renovation, either employ a decoration company with registration of electrical contractor to carry out the renovation, or employ a registered electrical contractor separately to carry out the electrical works involved in the renovation. In general, a person who employs anyone other than a registered electrical contractor to carry out electrical works commits an offence and is liable to a maximum fine of \$100,000 and to imprisonment for six months.

A registered electrical contractor shall arrange for registered electrical workers (i.e. registered electricians) of appropriate grades to carry out the electrical works. When carrying out the works, the responsible registered electrical worker shall cut off the power supply of the electrical installations prior to the commencement of works. After completion of the electrical works and before the electrical installation is energised for use, the registered electrical worker shall inspect and test the electrical installation, and issue a Work Completion Certificate (i.e. Form WR1) to certify that the electrical installation meets the requirements of the Electricity Ordinance. The registered electrical contractor shall, after endorsement, provide the owner with the original or a copy of the certificate and keep the certificate and all relevant records for at least five years.

The list of registered electrical contractors and workers are available at the EMSD website at [www.emsd.gov.hk](http://www.emsd.gov.hk) (Electricity Safety -> Registers -> Registered Electrical Contractors or Registered Electrical Workers).

# Guidance Notes on Household Air-conditioners Using Mildly Flammable Refrigerant and Standalone Commercial Refrigerators Using Flammable Refrigerant



Electrical and Mechanical Services Department

GUIDANCE NOTE ON  
STANDALONE COMMERCIAL REFRIGERATORS  
USING FLAMMABLE REFRIGERANT



Electrical and Mechanical Services Department

GUIDANCE NOTE ON  
HOUSEHOLD AIR-CONDITIONERS  
USING MILDLY FLAMMABLE REFRIGERANT



Currently, household air-conditioners using mildly flammable refrigerant and standalone commercial refrigerators using flammable refrigerant are available for sale in the market. To further enhance the trade's correct understanding of the safety, technology and statutory requirements of these products, the EMSD has uploaded the relevant guidance notes to its website in September 2020 for reference.

The guidance notes provide useful information on the international standards on the design, production and testing of these products, as well as points to note on the

supply, storage, transportation, installation, maintenance and disposal of these products and the relevant statutory requirements, so as to remind the public to be aware of product safety to prevent accidents, especially in regard to the safe use of flammable refrigerants. If the products are found to be out of order during operation, users should contact the agent or supplier for arrangement of inspection and maintenance by technical staff with special training on handling flammable refrigerants.

For enquiries on the guidance notes, please call 3912 0625.

# Use a Lift When Travelling with Bulky Item



New TV API launched by the EMSD in 2020



In daily life, there are occasionally cases in which people travelling with bulky items, such as suitcases, handcarts, strollers, etc., choose to use escalators for the sake of expediency and saving time from detouring to lifts. As you may be aware, using escalators when travelling with bulky items may cause accidents easily. Below are some examples illustrating the risks of such behaviour.



An accident in which a stroller got stuck with an escalator component

When a passenger with bulky item arrives at an escalator exit, it may be difficult for him to lift the item immediately because of the uneven floor and the considerable size and weight of the item. He may block the way of the

passengers behind, resulting in congestion or even collision. Furthermore, it is rather difficult for a passenger travelling with bulky item to keep his balance on the escalator. If the escalator breaks down or stops suddenly in case of emergency, the passenger will slip and fall easily, or even loosen his grip on the item, causing it to fall and thus affecting other passengers. The consequences could be dire. Besides, parts of bulky items such as strollers may get stuck with escalator components, leading to malfunction of and damage to escalators. In fact, such accidents happen every now and then. The EMSD has always attached great importance to public safety. Passengers are therefore advised to use lifts instead of escalators when travelling with bulky items to ensure safety.

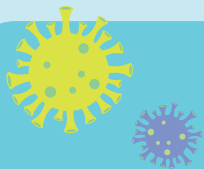
To further promote safe use of escalators, the EMSD launched a new series of Announcements in the Public Interest (APIs) on TV and radio and posters in March 2020, encouraging passengers to use lifts when travelling with bulky items and reminding them of the safety tips for travelling on escalators. The TV APIs can be viewed on the EMSD YouTube channel.

<https://www.youtube.com/watch?v=B9cNPi2aO24>



New promotional posters launched by the EMSD in 2020





## Get Vaccinated to Protect Yourself and Others



The Government has set up Community Vaccination Centres in each of the 18 districts to provide vaccination service to the public. For details of the online vaccination booking and information about the vaccines, please refer to the dedicated website at [www.covidvaccine.gov.hk](http://www.covidvaccine.gov.hk). To reserve the time and place for vaccination, please go to the 24-hour online booking system. Make a booking for vaccination as soon as possible. Thank you for your support!

### E & M Safety Quiz

Please fill in the reply slip below with **the most appropriate answer** for each question 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<sup>[1]</sup> of the quiz participants answering all questions correctly will receive a souvenir (on a first-come-first-served basis).

**1. Which of the following notes should one be aware of when purchasing and using chargers / power supply units?**

- A. Do not purchase chargers / power supply units without product information markings
- B. Purchase only chargers / power supply units with a three-pin plug suitable to be used in Hong Kong
- C. Do not use chargers / power supply units for a prolonged period of time
- D. All of the above

**2. When was Legionnaires' disease first recognised?**

- A. 1970
- B. 1975
- C. 1976
- D. 1980

**3. What is the minimum percentage of electrical works taking up in the overall renovation that requires the employment of a registered electrical contractor to carry out the electrical works involved in the renovation?**

- A. 30%
- B. 50%
- C. 70%
- D. A registered electrical contractor shall be employed for the relevant electrical works irrespective of the portion of electrical works involved in the overall renovation

**4. Which of the following is a safe behaviour when using escalators?**

- A. Travel with bulky items
- B. Keep one's eyes only on the mobile phone
- C. Walk on escalators
- D. None of the above

REPLY SLIP <sup>[2]</sup>			
Name:		Tel.:	
Hong Kong Address:			
Answers:			
Q1	Q2	Q3	Q4

[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. D 2. A 3. B 4. D 5. 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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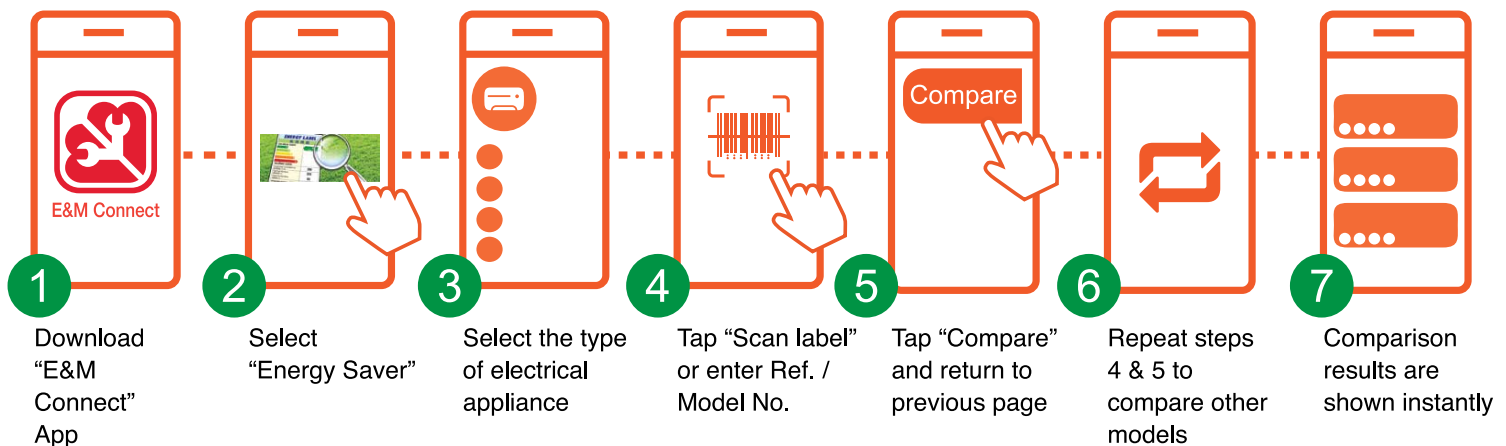


# Annual Electricity Charge in One Scan!



## How to use:

Download and watch video  
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Disclaimer:  
According to the latest "Code of Practice on Energy Labelling of Products",  
annual energy consumption of each product model is calculated based on  
average hours/days/times/standby loss hours per year operation of each product type.

For enquiries, please e-mail [info@emsd.gov.hk](mailto:info@emsd.gov.hk).