E & M Safety Newsletter

36th Issue 2023 July

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Safe Use of Domestic Gas Water Heaters

According to the Gas Safety Ordinance, from 1 January 2003 onwards, all models of domestic gas appliances, including water heaters, to be imported to, sold or supplied in Hong Kong for local use shall have the written approval of the Gas Authority (i.e. the Director of Electrical and Mechanical Services). Approved gas appliances shall bear a GU mark for identification by the trade and the public. For newly purchased domestic gas water heaters or those require removal and installation due to home renovation, removal, installation and testing of the heaters before use must be carried out by a registered gas installer employed by a registered gas contractor. Installation or modification of a gas water heater must not be carried out by the owner or a non-registered gas installer arranged by the owner, otherwise, it may pose a safety concern. Such act is also against the law and offenders may be prosecuted.

When using a domestic gas water heater, the following tips should be paid attention to:

- 1. Make sure the bathroom is well-ventilated; if feeling unwell in the shower, leave the bathroom immediately;
- 2. Arrange for a registered gas supply company to conduct safety inspection for a gas water heater and its installation once every 18 months;
- 3. Read the user manual provided by the manufacturer of the gas water heater and follow the instructions therein;
- 4. Stop using the gas water heater immediately should a failure occur or an abnormality be detected, and contact the appliance dealer for follow-up and repair;
- 5. Turn off the gas main switch promptly under safe condition if a gas leak is detected, and contact the appliance dealer for sending a technician to the scene to deal with the gas leak. Do not use the gas water heater again until it has been repaired.



For enquiries about the safety of domestic gas water heaters, please email to gasso@emsd.gov.hk.





Digital Logbook for Lifts and Escalators

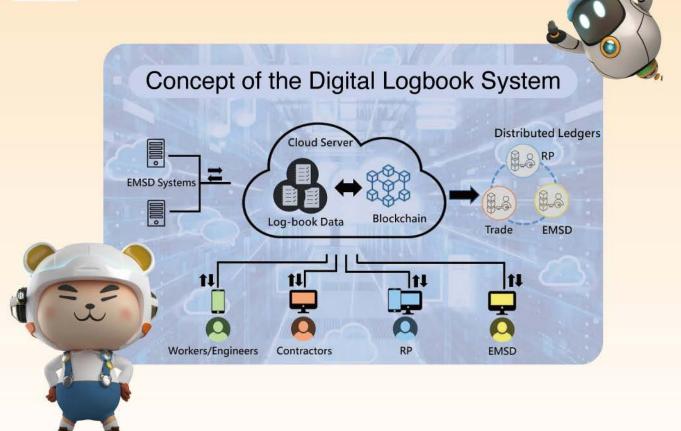
The Lifts and Escalators Ordinance (Cap.618) (the Ordinance) requires the responsible persons (RPs) for lifts/escalators to keep logbooks to record the works details in relation to their lifts/escalators. The requirement of keeping logbooks originated from the repealed Lifts and Escalators (Safety) Ordinance and the logbooks have always been in paper format since 1987. With the rapid technological development, members of the public and the trade are getting more used to handling daily matters with digital tools, and digital technologies such as cloud technology and blockchain technology are becoming more popular. To leverage digital technologies to benefit the public and the trade, the Electrical and Mechanical Services Department (EMSD) is developing the system of Digital Logbook for Lifts and Escalators with blockchain technology to replace paper logbooks.

Functions of the Digital Logbook

Through the mobile app of the Digital Logbook System, lift/escalator workers can fill in and upload the works details for lifts/escalators to the cloud system with ease. The EMSD, RPs and the registered lift/escalator contractors can download and view the previous and latest works record of the lifts/escalators anytime and anywhere through the mobile app or web portal of the system. Blockchain technology is applied for storage of the logbook records, rendering the records tamper-resistant and ensuring the authenticity of the logbook content. Moreover, the Digital Logbook will remind users about important events, such as periodic examination and special maintenance, to avoid unnecessary delay. The system can also carry out data analysis on collected information to help various stakeholders better understand the performance and condition of the lifts/escalators. It will facilitate joint monitoring, smart regulation and effective collaboration, thereby enhancing the efficiency of management of lifts/escalators and the reliability of lift/escalator services. Following the development and application of the Digital Logbook, the EMSD will continually add new functions to the system to facilitate RPs' management of the lifts/escalators. To learn more about the concept of the Digital Logbook System, please watch the following video:



https://www.youtube.com/watch?v=HUd37TC6bC8





Advantages of the Digital Logbook

- Lift/escalator workers can obtain the necessary information for their work in real-time and submit work reports more efficiently. The workers' application of the latest technologies can also enhance their professional image and allow the trade to progress continually.
- Lift/escalator contractors can check the workers' performance in carrying out lift/escalator works, understand the time required for repair and maintenance works for lifts/escalators as well as optimising the work schedule for better allocation of manpower and resources.
- The Digital Logbook can also help RPs to follow up the works on lifts/escalators and analyse the condition of the lifts/ escalators they managed so that they will be able to provide better facility management services.
- Data analysis of the lifts/escalators can also help the EMSD to find out the characteristics of different lifts/escalators and to better understand the situation of the trade, in order to formulate appropriate work guidelines and policies to facilitate trade development.

Development Progress of the Digital Logbook

In the consultation with various trade and RP organisations conducted by the EMSD, representatives of stakeholders welcomed the Digital Logbook initiative. The Digital Logbook will be officially launched for use free-of-charge in late 2022. The EMSD will continue to maintain close liaison with the trade and the RPs to ensure that this innovative solution can benefit all stakeholders.



https://www.emsd.gov.hk/en/lifts_and_escalators_safety/digital_log_books_system/index.html





 The EMSD held consultation meetings with the Building Services Operation and Maintenance Executives Society (top) and the Lift and Escalator Contractors Association (bottom)





 A seminar held by the EMSD to introduce the Digital Logbook





Refrigerator Safety First Pay Attention to Product Specifications

When purchasing a household refrigerator, many people will place more emphasis on the cost-performance ratio of the products. However, will you pay attention to whether the refrigerators meet the safety requirements?

According to the Electrical Products (Safety) Regulations, the supplier of a refrigerator shall ensure that a certificate of safety compliance [1] (Photo 1) has been issued for the product before its supply and the product complies with applicable national and international safety standards.



· Samples of the Certificates of Safety Compliance



Plug of a refrigerator

To ensure the safety and reliability of the refrigerators purchased by the public, we have introduced a voluntary scheme for registration of certificates of safety compliance in respect of electrical products [2], and compiled a list of models of household electrical products (including refrigerators) issued with certificates of safety compliance. Members of the public can visit our website to check the list, in order to find out whether the refrigerators to be purchased meet the safety requirements.

In addition, members of the public should pay attention to whether the refrigerators to be purchased are equipped with suitable plugs. Generally speaking, the plug of a refrigerator must comply with BS1363 and be fitted with a fuse.

When using refrigerators, members of the public should also pay attention to the following:

- If abnormalities are found in a refrigerator, such as abnormal sound or smell, insufficient cooling, or constant running or overheating of the compressor, stop using the refrigerator at once and arrange for an experienced technician to carry out inspection and repair.
- 2. Ensure good heat dissipation for the refrigerator. Do not block the area around the refrigerator.
- 3. If the refrigerant circuit is damaged, do not use any electrical appliances or open fire equipment nearby. Open all the windows for good ventilation and contact your maintenance agent immediately for follow-up.
- 4. Follow the instructions in the user manual to clean the refrigerator and carry out regular inspection and maintenance.



For enquiries on the safety of electrical products, please call 1823 or email to info@emsd.gov.hk. To know more about electrical products safety, please click the link or scan the QR code below to visit the Electrical Products Safety Corner:

https://www.emsd.gov.hk/en/electricity_safety/electricity_information/electrical_products_safety_corner/index.html



[1] The certificate of safety compliance (CSC) is a document certifying that the safety requirements of a household electrical product are complied with. For details, please click the link or scan the QR code below to access to the Guidance Notes for the Electrical Products (Safety) Regulation:

https://www.emsd.gov.hk/en/electricity_safety/electricity_information/electrical_products_safety_corner/new_edition_gn_epsr/index.html



[2] For details of the voluntary scheme for registration of certificates of safety compliance in respect of electrical products, please click the link or scan the QR code below:

https://www.emsd.gov.hk/en/electricity_safety/registers/household_electrical_products_with_certificate/index.html

Energy Saving and Decarbonisation for All Campaign - Energy Saving Charter, 4T Charter and Energy Saving Championship Scheme

To combat climate change, the Government is dedicated to promoting low-carbon transformation in Hong Kong and is proactively taking multi-pronged measures to reduce emissions and save energy, with a view to achieving carbon neutrality before 2050.

Hong Kong has a total electricity consumption of over 44 billion kWh, with our buildings accounting for about 90% of the city's electricity usage and around 60% of our carbon emissions arising from the electricity production related to energy consumption of buildings. Hence, improving energy efficiency in buildings has become our primary decarbonisation target. When it comes to energy conservation, the community plays an indispensable role. Therefore in 2012, the Electrical and Mechanical Services Department (EMSD) launched the Energy Saving Charter for the first time, with the aim of fostering closer partnership with the commercial and community organisations as well as launching a sector-based energy saving campaign to promote energy saving in all sectors in order to • Promotional leaflet on combat climate change.



Energy Saving Charter 2023 and 4T Charter

Energy Saving Charter

The Energy Saving Charter initially focused on inviting the building and property management sectors to pledge to reduce electricity consumption on air conditioning during mid-summer by maintaining the average indoor temperature at their premises between 24°C and 26°C. Starting from 2016, the scope of the Energy Saving Charter has been extended to cover more sectors. In June 2022, over 3000 organisations signed up to the Energy Saving Charter, involving 10 types of premises, including shopping malls, office/commercial/industrial buildings, residential buildings and housing estates, offices, shops/restaurants, premises of non-government organisations/community facilities, kindergartens/primary schools/secondary schools/post-secondary education institutions, hotels, hospitals and other organisations. They pledged not only to maintain an appropriate indoor temperature at their premises, but also to switch off appliances when not in use and procure energy-efficient appliances. Besides, appreciation certificates will be presented to organisations that successfully recruit a significant number of shops or offices to sign up to the Energy Saving Charter, with a view to further promoting participation of shops and offices in the Charter and encouraging the building and property management sectors, tenants, occupants and staff to adopt energy saving practices together.

4T Charter

To operationalise the Paris Agreement, we have established the 4T framework in 2017 to deepen energy saving in existing buildings. Under the 4T Charter, we encourage the participating organisations, including such stakeholders as commercial and non-profit making organisations, to set their energy saving targets, draw up timelines and ensure transparency of energy saving results, and everyone to work together to achieve the above targets.



Reasons for Implementing the Charters

- To conserve energy and combat climate change in Hong Kong, where electricity generation accounts for more than 60% of greenhouse gas emissions.
- To foster close cooperation among the Government, non-government organisations and business sector for a community-wide campaign to save energy, with cross-sector commitment to environmental protection.
- Participation Certificates of Energy Saving Charter 2022 and 4T Charter

Benefits of Joining the Charters

- Promote environmental protection and contribute to the sustainability of the Earth.
- Establish a green and low-carbon image and enhance the profile of the participating organisations in environmental protection and sustainable development.
- Set a role model for fulfilling corporate social responsibility.
- · Reduce electricity consumption and expenditure.



https://www.energysaving.gov.hk/esc2022/en/charter/index.html





 Together with Hanson, the mascot of the then Environment Bureau and Witty Bear, the EMSD's mascot, Mr Pang Yiu-hung, Director of Electrical and Mechanical Services, officiated at thelaunching ceremony for "Energy Saving and Decarbonisation for All 2022" Campaign on 17 June 2022.



 Photo shows Mr Pang, Hanson and representatives of the organisations actively supporting the Energy Saving Charter 2022.



 EMSD's engineer was briefing Energy Saving Charter and 4T Charter to the general public.

In order to call on and invite more members of the public to join the Charters, we have arranged two briefing sessions for Energy Saving Charter 2023 on 28 Feb and 15 March 2023. We hope that all sectors in the community will continue to shoulder the responsibility of a member of the global village by actively participating in energy conservation and carbon emission reduction, and thus creating a healthy, livable and sustainable environment for Hong Kong. For details of the Energy Saving Charter and 4T Charter, please visit the thematic website:



https://www.energysaving.gov.hk/esc2023/en/charter/index.html

Energy Saving Championship Scheme

This year, there are two categories under the scheme, namely the competition for organisations and the competition for students.

Wise Save @ RCx Competition

The competition for organisations, which is titled Wise Save@RCx Competition, aims to encourage the trade to work together to enhance energy efficiency and conservation in buildings with the application of retro-commissioning (RCx) and Innovation and Technology (I&T), in order to dedicate their efforts to strive for carbon neutrality.

The target participants of the competition are owners, property management companies (PMCs) and facility management companies of buildings for which RCx has commenced (including RCx projects at planning stage and implementation stage), as well as RCx services providers. All types of buildings are welcome to participate. Each application for the competition should be made on building basis and submitted by the participating organisation.

The application for Wise Save@RCx Competition was closed on 31 October 2022. Judging panel has arranged assessment and interview to select winners. The results of Wise Save@RCx Competition will be announced in the thematic website: For more details of the competition, please visit the website:



https://www.energysaving.gov.hk/eschampion2022/en/scheme/index.html



 Promotional leaflet on Wise Save
 RCx Competition

Competition for Students

The competition for students aims to encourage the youth to exercise their creativity and imagination in achieving carbon neutrality by energy saving and wider adoption of renewable energy (RE). The competition for students has two sub-categories as listed below:

- 1) Primary School Category
 - · Students can enter the competition on individual basis; and
 - · On group basis with their parents
- 2) Secondary and Post-secondary School Category
 - Students can enter the competition on individual or group basis (with no more than five participants)

The application for Students Competition was closed on 11 January 2023. Judging panel will arrange assessment to select winners. For details of the competition, please visit the thematic website:



https://www.energysaving.gov.hk/eschampion2022/en/home/index.html

The EMSD will produce and upload videos on energy saving measures proposed by award winners to the "Energy Saving for All" website for promotion and sharing. The list of winning teams will also be published on the "Energy Saving for All" website for recognition.



 Promotional leaflet on the competition for students

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[†] of the quiz participants answering all questions correctly will receive a souvenir (on a first-come-first-served basis).

Q1: Pursuant to the Gas Safety (Gas Supply) Regulations, what is the period of time within which a LPG bulk tank must undergo a complete test and examination at least once after commissioning?

A: 1 year B: 5 years C: 10 years D: 15 years

Q2: What is/are the advantage(s) of the Digital Logbook?

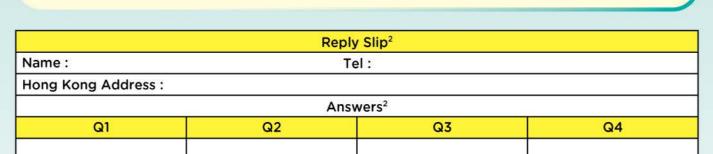
- A. Lift/escalator workers can obtain the necessary information for their work in real-time
- B. Help RPs to analyse the condition of the lifts/escalators they managed
- C. Help the EMSD to formulate appropriate work guidelines and policies to facilitate trade development
- D. All of the above

Q3: Which of the following is UNSAFE when using a refrigerator?

- A. Stop using the refrigerator immediately if abnormalities are found
- B. Ensure good heat dissipation for the refrigerator
- C. Regular inspection and maintenance of the refrigerator
- D. Block the area around the refrigerator

Q4: According to the Energy Saving Charter, what is the average indoor temperature which should be maintained during the summer months of June to September?

- A. Between 20°C and 22°C
- C. Between 24°C and 26°C
- B. Between 22°C and 24°C
- D. Between 26°C and 28°C



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

Last Answer: 1.C 2.D 3.C 4.D 5.D 6.B

Feedback

歡迎讀者就版面或內容提出寶貴意見及建議,使我們能作出改善,務求為大家提供更多有用和有趣的資料。如欲提出意見或查詢,請與我們聯絡。《機電與我》中文及英文版均可於我們的網頁 (www.emsd.gov.hk) 內瀏覽。

機電工程署《機電與我》編輯

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Both the English and Chinese versions of this *E&M Safety Newsletter* are available on our web page at www.emsd.gov.hk. Your enquiries and comments are most welcome. Please write to:

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







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.