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   B. Minor Works Contractors
   C. Registered Lift and Escalator Contractors
   D. Registered Energy Assessors

2. Which one of the followings requires attention in selecting a suitable registered lift/escalator contractor?
   I. Background of the registered contractor
   II. Spare parts
   III. Time required for maintenance works
   IV. Emergency reaction capability
   A. Only I and II
   B. Only III and IV
   C. Only I, III and IV
   D. All of the above

3. What requires attention before one gets on an amusement ride?
   A. Tie up one’s long hair
   B. Avoid carrying loose personal belongings
   C. Make sure that the pocket opening is securely fastened if things are put inside the pocket
   D. All of the above

4. What portion of electrical works must take up in the overall renovation to require 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 should be employed irrespective of the portion of electrical works involved in the overall renovation

5. How many grades are mandatory energy labels divided into?
   A. 4
   B. 5
   C. 6
   D. 7

6. Which of the following is a proper way to protect gas pipes when carrying out works?
   A. There is no need to maintain adequate safety clearance as long as we know where the gas pipes are positioned.
   B. All gas pipes must be assumed to be live. Consider applying to the gas company for gas supply disconnection if necessary.
   C. Gas pipes can be used to secure scaffolding or be climbed on.
   D. Temporary markings should not be added on the gas pipes.
Editor's Notes

This E&M Safety Newsletter is already the 20th issue. We would like to express our heartfelt thanks for your support. In this issue, we will provide you with information on how to select a suitable registered lift and escalator contractor for carrying out the maintenance services, and the proper arrangements for home renovation involving electrical works. We will also talk about the energy labels and the safety of gas pipes. With the festive seasons just around the corner, we will also offer some safety tips on the use of amusement rides and the choice of festive lighting chains. As we are getting close to the New Year, we wish you a joyous holiday.

How to Select a Suitable Registered Lift & Escalator Contractor for the Maintenance Services?

The Lifts and Escalators Ordinance (the Ordinance) stipulates that the responsible person for a lift/escalator must arrange for a registered lift/escalator contractor to undertake the maintenance works of the lift/escalator. The Register of Registered Contractors has been uploaded to the EMSD website. Apart from the price factor, the following should be noted in selecting a suitable registered contractor:

1. Background of the registered contractor
   - Business scale (e.g., number of employees, number of registered engineers and registered workers, as well as number of lifts/escalators which the contractor is currently in charge of maintaining)
   - Trade reputation, performance and experience
   - The practice of a quality management system (e.g., availability of ISO9001 certification, etc.)
   - Safety administration (e.g., whether registered safety officers are employed)
   - Coverage of insurance bought

2. Adequacy of technical knowhow
   - Whether the staff have received repair and maintenance training and already have the repair experience relevant to the particular model of lift or escalator.
   - Whether the contractor has sufficient technical information with regard to the particular model of lift or escalator (such as wiring diagrams, operation and maintenance manuals).
   - Whether the lift manufacturer will provide the contractor with technical support.

3. Spare parts
   - Whether the spare parts for the particular model of lift or escalator are kept by the contractor, and whether the number of such spare parts is sufficient.
   - Whether there are ways to obtain or purchase the spare parts for the particular model of lift or escalator.
   - Whether the spare parts are obtainable from the manufacturer and whether there is supporting proof from the manufacturer, and how much time is required for delivery.
   - In case substitutes have to be used, whether the contractor can ensure their quality and compatibility with other machinery parts.

4. Time required for maintenance works
   - Whether the periodic maintenance (oil)ing is conducted on a weekly, bi-weekly or monthly basis.
   - The time needed for performing periodic maintenance and the coverage.
5. Emergency reaction capability
- Breakdown of a lift or power failure may lead to the trapping of lift passengers. What is the time frame within which the contractor can send staff to rescue the trapped passengers?
- The geographical distribution of the contractor's service centres, such as the distance from the nearest service centre to the building, and the number of emergency support staff during and outside office hours.
- Emergency repair and rescue arrangements in case of a typhoon.

6. Performance rating system
- In selecting a suitable registered contractor to maintain and repair the lift/escalator, refer to the Registered Lift/Escalator Contractors' Performance Rating Scheme established by EMSD and check the ratings and past performance records of all registered contractors. Such information is available at the EMSD website.

C hristmas and New Year are just around the corner. You may be planning a fun trip to the theme parks or family amusement centres to relax and recuperate. To enjoy a safe and happy amusement ride, you are reminded to pay attention to your clothing and personal belongings before getting on the ride.

Theme parks are mostly outdoors. It may be rather windy due to their relatively exposed locality. Members of the public should take heed of the weather report before heading to the park, and take appropriate protective measures to ward off the cold, such as wearing a thick coat, scarf, gloves, etc. to keep warm.

Before taking the ride, we should make sure that our clothing is secure. In order to avoid injury caused by entanglement, we should tie up our long hair, fasten our coats and tuck the ends of our scarves inside our clothing whilst on the ride. Besides, we should always make sure that our shoelaces are tightly fastened.

We should also check whether the personal belongings we carry are secure, and leave them behind if they are not. Hats and glasses are examples of the latter. We should not hold a camera or mobile phone on the ride in case they lose our grip and cause injury to ourselves and others when the ride is in motion. If designated temporary lockers are available near the amusement ride, we should store our things in these lockers, or we should put them into our pockets or backpacks which must be securely closed before we get on a ride.
Proper Arrangements for Home Renovation Involving Electrical Works

M. MAK is planning to renovate his home, which includes the replacement of electrical installations. He makes an enquiry to EMSD as he does not know who he should hire to carry out the works.

The Electricity Ordinance stipulates that no person shall employ anyone other than a registered electrical contractor to carry out electrical works. If installation or alteration of electrical installations is involved in the renovation of a flat, the flat owner should, irrespective of the portion of electrical works in the overall renovation, either employ a decoration company with electrical contractor registration to carry out the renovation, or employ a registered electrical contractor separately to directly carry out the electrical works involved in the renovation.

A registered electrical contractor should arrange registered electrical workers of appropriate grades (i.e. registered electrical workers) to carry out the electrical works. When carrying out the works, the responsible registered electrical worker should cut off the power supply of the electrical installation prior to the commencement of work. Where necessary, the registered electrical contractor should apply for temporary disconnection of power supply with the power supplier to ensure safety of the electrical worker and avoid causing damage to and impact on the power supply of the building in the event of an accident. Once the electrical works are complete and before the electrical installation is energised for use, the registered electrical worker should inspect and test the electrical installation, and issue a Work Completion Certificate (i.e. Form WR1) to certify that the electrical installation has met the requirements of the Electricity Ordinance. The registered electrical contractor should, after endorsement, provide the owner with the original or copy of the certificate and keep the certificate and all relevant records for at least five years.

Smart Choice and Proper Use of Festive Lighting Chains

The Electrical Products (Safety) Regulation stipulates that household electrical products sold in Hong Kong, including festive lighting chains, should be issued with “certificates of safety compliance” as proof that the products comply with the relevant international safety standards or other equivalent safety standards. Members of the public should take heed of the following when buying and using festive lighting chains:

1. Choose and buy branded festive lighting chains from reputable stores.
2. The construction should be of double or reinforced insulation design. In addition to appropriate markings on rated voltage, rated current/input power, rated frequency, the lighting chains should also be marked with the model number and manufacturer’s name or trademark, and a “□” symbol.
3. Only 3-rectangular-pin plugs to BS1363 or 3-round-pin plugs to BS546 should be used. Avoid using other types of plugs such as 2-pin plugs.
4. To avoid danger, the lighting chains should not be installed in an outdoor environment arbitrarily unless they are specifically designed for such purpose.
5. To install the lighting chains in accordance with the instruction manual. Do not overload.
6. If the lighting chains have not been used for a prolonged period of time, they should be checked before use again. Make sure they are in normal condition prior to use.
7. Sufficient space must be allowed around the lighting chains and the power supply for heat dissipation.
8. Lighting chains should not be installed in a humid area, such as bathroom, balcony, etc., to avoid earth leakage.
9. To ensure safety, switch off the power supply of the lighting chains before leaving home.
10. In the event of abnormalities, such as strange noises and smells, or tripping for unknown reason, stop using and unplug the lighting chains immediately and arrange for checking by a qualified technician.

For enquires on electrical products safety, please call 1823 Citizen’s Easy Link or email to info@emsd.gov.hk. You may also write to EMSD (address: 3 Kai Shing Street, Kowloon).
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2. Proper disposal of the used festive lighting chains
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How Knowledgeable are You about the
Energy Label?

T o enable members of the public to choose energy
saving products, the Government has introduced the
Mandatory Energy Efficiency Labelling Scheme under the
Energy Efficiency (Labelling of Products) Ordinance (Cap.
598) requiring energy labels be shown on prescribed products
supplying Hong Kong to update consumers on their energy efficiency performance.
In providing for sale the five types of prescribed products
(including room air-conditioners, refrigerating appliances,
compact fluorescent lamps (CFLs), washing machines and
dehumidifiers) in Hong Kong, suppliers (including retailers
and distributors) should ensure that these products are affixed
with energy labels. All the listed models of these five types of
prescribed products have been uploaded to the EMSD Energy
The energy efficiency information
shown on energy labels is obtained under
the same standard testing environment
(taking dehumidifier as an example, the
temperature and relative humidity of the
testing environment are set at 26.7 and 60%
respectively) for easy comparison of the
energy efficiency performance between
different product models. The energy
efficiency of a product is graded on
a scale of one to five, with one being
the most energy efficient. Members of
the public can refer to the energy efficiency
performance (e.g., energy efficiency grading,
annual energy consumption, etc.) shown
on the energy label to select energy
efficient products.

Choosing
Energy Efficient Luminaires

I ncandescent light bulbs (ILBs) are energy inefficient and
consume more electricity. They have a shorter average life
span of around 1 000 hours, and hence have to be replaced
frequently. There is already an adequate supply of more energy
efficient replacement options for ILBs in the market, and the
most common alternative is compact fluorescent lamps (CFLs)
which have been put under the Mandatory Energy Efficiency
Labelling Scheme.
CFLs can save around 75% of electricity and have a longer
life span which, on average, can be 6 to 8 times that of ILBs
or longer (i.e. around 6 000 to 8 000 hours or more). A
household of four can achieve up to $440 of annual savings
in electricity charges by replacing ILBs with more energy
efficient CFLs, assuming the electricity tariff is $1.0/kWh. Of
course, improving energy efficiency can also help cut down
greenhouse gas emissions.
Apart from CFLs, Light Emitting Diode Lamps (i.e. LED
lamps) are another type of energy efficient luminaire being
gradually used for general lighting purpose in recent years.
LED products available in the market usually have a nominal
life span of 20 000 to 50 000 hours, which can save energy
as well as reducing the frequency of replacement. LED lamps
have been put under the Voluntary Energy Efficiency Labelling
Scheme.
To promote community-wide participation in saving
energy, the Government held a launching ceremony for the
Energy Saving Charter on “No Incandescent Light Bulbs” on 5
June this year. Other publicity and promotional activities were
also rolled out to encourage the community to stop using
energy inefficient ILBs.
Take All Necessary Precautionary Measures to Avoid Damage to Gas Pipes

Works (such as water works, drainage works, road resurfacing works, building maintenance works, interior renovation works, etc.) carried out in the vicinity of gas pipes may cause damage to the pipes if safety precautions are not taken. The consequence may be gas leaks, fire or explosion endangering the safety of the workers and the general public, and gas disruptions for the surrounding area causing great public inconvenience.

To prevent these incidents, the Gas Safety Ordinance (Cap. 51) stipulates that any person who carries out works in the vicinity of a gas pipe shall take all reasonable steps to ascertain the location and position of the gas pipe prior to the commencement of works, and take all reasonable measures to protect the gas pipe from damage in the course of works.

Methods for Ascertaining the Position of Gas Pipes

(1) When carrying out works that involve excavation or ground penetration, the following “4 safety steps” should be adopted to ascertain the location and position of underground gas pipes:

**Step 1: Gas pipe plans**
Obtain information and layout plans showing the position of nearby underground gas pipes from gas supply companies

**Step 2: Pipe detection**
Carry out pipe detection to identify the alignment and depth of underground gas pipes

**Step 3: Trial Holes**
Use hand tools to dig trial holes and expose the gas pipes so as to ascertain their position

**Step 4: Safe excavation practices**
Use hand tools to carry out excavation as far as possible; maintain a safety distance of at least one metre when using excavators or other mechanical plants in the vicinity of gas pipes.
When carrying out works inside or outside a building, reasonable steps should be taken to ascertain the position of gas pipes inside or outside that building.

(1) When carrying out works that involve excavation or ground penetration, the following “4 safety steps” should be adopted to ascertain the location and position of underground gas pipes:

**Step 1: Information about gas pipes**
Request information about the gas pipes attached to or installed in the building from the gas supply company, owners of the building or the management company.

**Step 2: Pipe detection**
Detect gas pipes inside the walls by using appropriate pipe detector and tools.

**Step 3: Trial Holes**
Use hand tools to dig trial holes and expose the gas pipes so as to ascertain their position.

**Step 4: Safe excavation practices**
Use hand tools to carry out excavation as far as possible; maintain a safety distance of at least one metre when using excavators or other mechanical plants in the vicinity of gas pipes.

Ways to Protect Gas Pipes from Damage

(2) When conducting works outside or inside a building:

Gas pipes must not be used to secure scaffolding, climbed on, or interfered with in any other way. Temporary markings should be added on the gas pipes, and special measures be taken to protect the gas pipes.

If large scale structural or renovation works to be carried out for the building may result in damage to the gas pipes, one should enquire with the gas supply company to arrange for gas supply disconnection.

Code of Practice

A Code of Practice on Avoiding Danger from Gas Pipes has been published to provide specific guidelines on the precautionary measures that should be taken when works are carried out in the vicinity of gas pipes so as to avoid causing damage to the pipes in the course of works. This code of practice and other relevant leaflets are available free on EMSD website at [http://www.emsd.gov.hk](http://www.emsd.gov.hk) for public reference.
E & M Safety Quiz

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Answers:

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Residential estate  School  District Office  New immigrant centre

Others (please specify): ___________________________

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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