

# Requirements for Gas Installations in Food Premises

Gas Standards Office  
Electrical and Mechanical Services Department



# Functions of EMSD as Regulator of Gas Safety

- The Gas Standards Office of the EMSD is responsible for the enforcement of the Gas Safety Ordinance (Cap. 51):
  - Gas Safety Ordinance (Cap. 51)
  - Gas Safety (Gas Quality) Regulations (Cap. 51A)
  - Gas Safety (Gas Supply) Regulations (Cap. 51B)
  - Gas Safety (Installation and Use) Regulations (Cap. 51C)
  - Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations (Cap. 51D)
  - Gas Safety (Registration of Gas Supply Companies) Regulations (Cap. 51E)
  - Gas Safety (Miscellaneous) Regulations (Cap. 51F)
  - Gas Safety (Gasholders Examination) Regulation (Cap. 51G)
- The controlled gases include **town gas**, **liquefied petroleum gas (LPG)** and natural gas.
- Oversee the safety of the **import**, production, **storage**, transportation, supply and **use** of gases.



# 1. Supply of Gaseous Fuel





# Gaseous Fuel for Food Premises



**Town Gas**



**Piped LPG**



**LPG cylinder**

- When piped gas supply (Town Gas or LPG) is available, it should be used directly.
- **LPG cylinders** should **only be used** in situations where **piped gas supply is unavailable**.
- LPG must **not be used in basement** kitchen nor seating area **below ground level**.



# Supply of Gaseous Fuel

- At present, there is one Registered Gas Supply Company (RGSC) supplying Town Gas, with its supply network covering the majority of Hong Kong.
- Piped LPG is readily available in several housing estate developments, eliminating the need for additional gas supply pipe installations.
- At present, there are six RGSCs supplying LPG cylinders directly or through their LPG distributors.
- Users may purchase LPG cartridges from any retails, however, it is prohibited to:
  - Import LPG cartridge by oneself; or
  - Use LPG cartridge of a non-approved model.

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# LPG Distributor



瓶裝石油氣分銷商  
安全表現評級計劃  
LPG Cylinder Distributor  
Safety Performance Recognition Scheme



List of LPG  
Distributor

- Except RGSC, only **LPG distributors with written approval** from RGSC could also **supply LPG cylinder**.
- LPG distributor could provide:
  - ✓ **advice and support** to customers on **LPG works**;
  - ✓ **Regular safety inspection** service for gas installations.
- In 2017, the EMSD has launched a “**LPG Cylinder Distributor Safety Performance Recognition Scheme**” for public reference, which rate distributors with “**Gold**”, “**Silver**” or “**Bronze**” grade based on their safety performance during the year.

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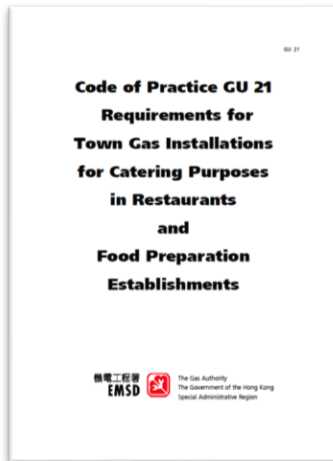
## 2. Gas Installation Work



# Gas Safety Requirements for Food Premises

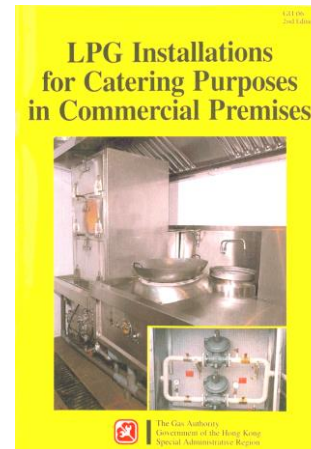
- The design, installation and use of gas installations must comply with the requirements outlined in the Gas Safety Ordinance and its subsidiary legislations, along with the Code of Practice and Guidance Note issued by the EMSD.
- For gas installations in food premises, the following Code of Practice has been formulated :

## Town gas:



*GU21 - Requirements for Town Gas Installations for Catering Purposes in Restaurants and Food Preparation Establishments*

## LPG:



*GU06 - LPG Installations for Catering Purposes in Commercial Premises*



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Code of Practice](#)

- Some RGSCs also impose technical requirements for gas installations to be supplied with gas.





# Gas Installation Work

- In accordance with the Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations (Cap. 51D):
  - the fabrication, connection, disconnection, testing, commissioning, decommissioning, maintenance, repair or replacement of gas fittings are classified as gas installation work.
  - **Only Registered Gas Installer** of a class in respect of which he/she is so registered and **employed by a Registered Gas Contractor** may personally **carry out gas installation work**.
- The list of Registered Gas Contractor has been uploaded to the EMSD's website for public access.
- The replacement of LPG cylinder was not classified as gas installation work, restaurant may arrangement trained staff to replace the cylinders.

Training video for LPG  
cylinder replacement :



List of Registered  
Gas Contractor :



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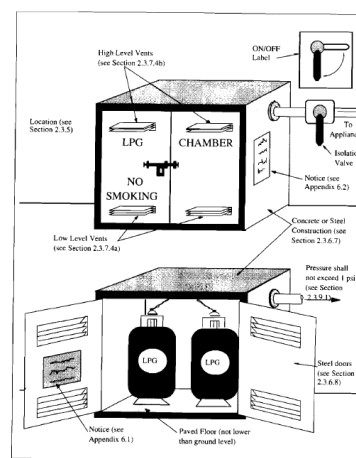
# LPG Cylinder Storage Chamber

- LPG cylinders must be **stored in designated storage chamber** within food premises, the chamber should be built at well ventilated area which would not obstruct any means of escape.
- The requirements on location and design of the LPG cylinder storage chamber were specified in the GU06 - *LPG Installations for Catering Purposes in Commercial Premises*.

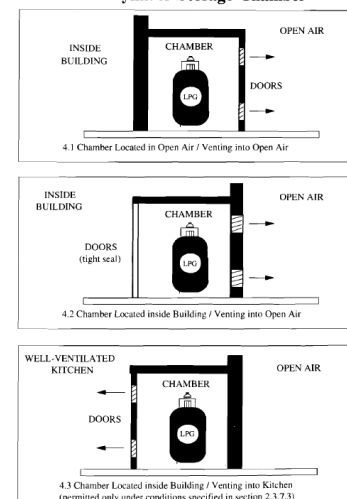


Typical LPG Cylinder Storage Chamber

Appendix 3  
Typical LPG Cylinder Storage Chamber



Appendix 4  
Location and Ventilation of  
LPG Cylinder Storage Chamber



Requirements on location and design of  
LPG cylinder storage chamber

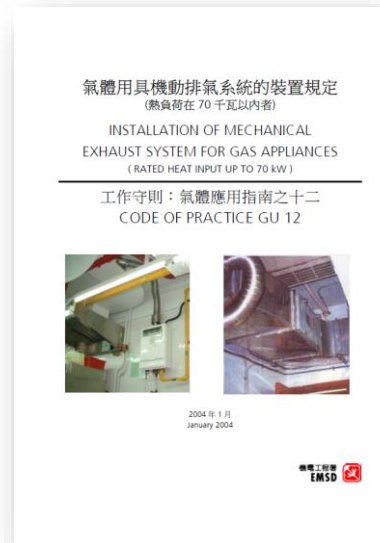


# Exhaust System of Gas Appliance

- If sufficient natural ventilation or fresh air circulation could not be provided in the kitchen, a **mechanical exhaust system** should be installed.
- Any **exhaust pipe connected directly to mechanical exhaust system must be equipped with interlock devices and indicator lights** in accordance with GU12 - *Installation of Mechanical Exhaust System for Gas Appliances*.



*Typical Interlock Device and Indicator lamp*



*GU12 - Installation of Mechanical Exhaust System for Gas Appliances*



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Code of Practice





# Certificate of Compliance and Certificate of Completion

- “**Certificate of Compliance**” and “**Certificate of Completion**” should be issued by the Registered Gas Contractor before and after the gas installation work respectively.
- The location of the LPG cylinder storage chamber should be marked on the drawings, as well as its basic technical specifications.

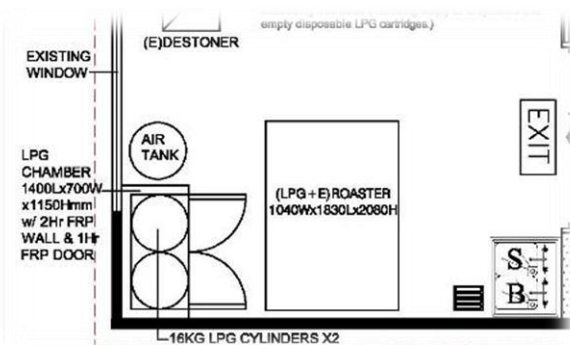


Illustration of LPG Cylinder Storage Chamber

Licensing of Food Premises using Gaseous Fuels (Town Gas / Liquefied Petroleum Gas)

**Certificate of Compliance**  
(New Gas Installation or Alteration to Existing Gas Installation)

This is to certify that all proposed gas installation / commissioning \* work associated with the application for

(a) issue of a general restaurant / light refreshment restaurant / factory canteen / food factory / bakery / offensive trade \* licence, or  
(b) permission to effect alteration to existing installation in the licensed general restaurant / light refreshment restaurant / factory canteen / food factory / bakery / offensive trade at

\_\_\_\_\_  
(Address of Premises)

\_\_\_\_\_  
(Address of Premises)

can be undertaken in compliance with:

(i)	Gas Safety (Gas Supply) Regulations (Cap. 51B)
(ii)	Gas Safety (Installation and Use) Regulations (Cap. 51C)
(iii)	Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations (Cap. 51D)
(iv)* For Town Gas	Current Code of Practice – Hong Kong & China Gas Company Limited: Operating Procedures – Service – “Installation of Low Pressure Installation Pipes” (HKCG-SER-OP6) and “Installation of Non-domestic Appliances” (HKCG-SER-OP8) Requirements for Town Gas Installations for Catering Purposes in Restaurants and Food Preparation Establishments (Code of Practice GU21)
(v)* For LPG	LPG Installations for Catering Purposes in Commercial Premises (Code of Practice GU06)

# Centralized Piped Supply	# Cylinder Chamber Supply	# Dim-sum trolley
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by \_\_\_\_\_  
(Company Name)

Company chop and signature \_\_\_\_\_ RGC No. \_\_\_\_\_  
Telephone No. \_\_\_\_\_ Date \_\_\_\_\_

\* please delete whichever is inapplicable  
# please tick where applicable

Licensing of Food Premises using Gaseous Fuels (Town Gas / Liquefied Petroleum Gas)

**Certificate of Completion**  
(New Gas Installation or Alteration to Existing Gas Installation)

This is to certify that:

(a) all gas fittings (including gas appliances) associated with the application for

(i) issue of a general restaurant / light refreshment restaurant / factory canteen / food factory / bakery / offensive trade \* licence, or  
(ii) permission to effect alteration to existing gas installation in the licensed general restaurant / light refreshment restaurant / factory canteen / food factory / bakery / offensive trade at

\_\_\_\_\_  
(Address of Premises)

\_\_\_\_\_  
(Address of Premises)

(b) have been installed and / or commissioned \* in accordance with:

(i)	Gas Safety (Gas Supply) Regulations (Cap. 51B)
(ii)	Gas Safety (Installation and Use) Regulations (Cap. 51C)
(iii)	Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations (Cap. 51D)
(iv)* For Town Gas	Current Code of Practice – Hong Kong & China Gas Company Limited: Operating Procedures – Service – “Installation of Low Pressure Installation Pipes” (HKCG-SER-OP6) and “Installation of Non-domestic Appliances” (HKCG-SER-OP8) Requirements for Town Gas Installations for Catering Purposes in Restaurants and Food Preparation Establishments (Code of Practice GU21)
(v)* For LPG	LPG Installations for Catering Purposes in Commercial Premises (Code of Practice GU06)

# Centralized Piped Supply	# Cylinder Chamber Supply	# Dim-sum trolley
----------------------------	---------------------------	-------------------

(c) the gas installation was commissioned on \_\_\_\_\_

RGI Name: \_\_\_\_\_  
RGI No. \_\_\_\_\_ Class Registered: \* 5, 6, 7  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
On behalf of \_\_\_\_\_  
(Company Name)

Company chop and signature \_\_\_\_\_ RGC No. \_\_\_\_\_  
Telephone No. \_\_\_\_\_ Date \_\_\_\_\_

\* please delete whichever is inapplicable  
# please tick where applicable

Certificate of Compliance and Certificate of Completion

### 3. Requirements for Gas Utilization



# Storage of LPG Cylinders

- Unless approved by the Gas Authority, no person shall store LPG cylinder(s) with total nominal capacity of more than 130 Litres. (Including LPG cylinder in use, spent LPG cylinder and LPG cartridge).
- The capacity of LPG cylinder commonly seen is approximately 35 Litres (15 – 16 kg), only 3 cylinders could be kept at a time.
- The replacement rate of LPG cylinders in food premises should not exceed once per day.  
If the gas consumption is significantly high, it should be well-coordinated with gas distributor, the owner may even consider applying to construct a NGI.



35-L LPG Cylinder

標準石油氣重量 (公斤) Nominal LPG Weight (kg)	許可瓶數 (個) Permitted no. of cylinders
2	27
5	10
8	6
10-10.5	5
12-13.5	4
15-16	3
21-22	2
45-50	1





# Flexible Tubing and Low-Pressure Regulator for LPG Cylinder



批准標記：

機電工程署批准	GTxxxx
EMSD APPROVAL	GTxxxx
期限	MM/YYYY
EXPIRY	MM/YYYY

xxxx 代表批准號碼

MM/YYYY 代表月份 / 年份

- Installation pipe made of non-metallic materials must not exceed 2 meters in length and must not be directly connected to a gas water heater.
- Flexible tubing hoses must be of a **model approved by the EMSD** and must be **replaced before their expiration date**.

- If LPG cylinder is used together with low-pressure regulator, attention should be made to the **expiry date** shown on its label, and it should be replaced before expiry.



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# Use of Gas Appliance

- Any **Domestic Gas Appliance** to be used in food premises, including **LPG cassette cooker, must** be of type approved by the Gas Authority, which **bear GU mark**.

*Example of Domestic Gas Appliances common found in food premises:*



"GU" Mark



LPG Cassette Cooker



Gas Hot Plate



Gas Water Heater



# Providing LPG Cassette Cooker for Customers' Use



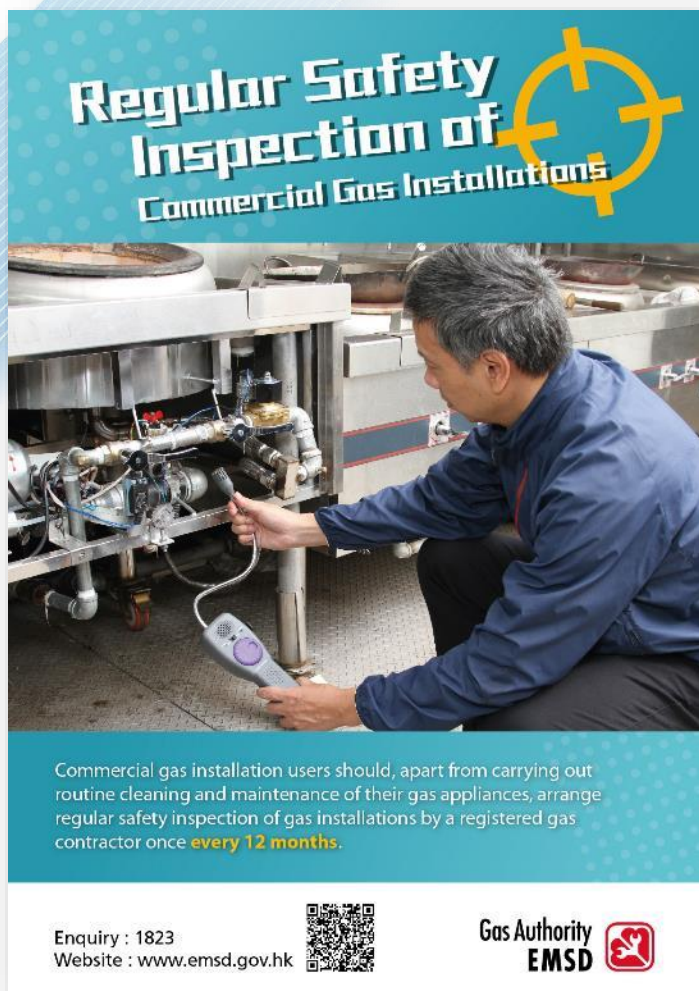
- For LPG cassette cooker to be used by customers at dining area, such cooker **must bare GU mark**.
- Please pay attention to and remind customers of the following:
  - Do not use non-genuine accessories.
  - Do not use 2 cookers next to each other.
  - Do not use oversize cooking utensils.
  - **Keep away from flames** when **replacing** LPG cartridge
  - Ensure **adequate ventilation and keep away from flammable materials** when using the gas stove.





## 4. Regular Safety Inspection for Gas Installations

# Regular Safety Inspection for Gas Installations



- Restaurant should arrange Registered Gas Contractor to conduct **safety inspection and maintenance** of gas installations **every 12 months**.
- **Replace expired or worn-out components** based on the recommendations of Registered Gas Installer.
- **Retain** a copy of the **safety inspection records**.
- Consult your RGSC or LPG distributor.



## 5. Summary





# Summary

- **LPG cylinders should only be used** in situations where a **piped gas supply is unavailable**, they should be purchased from LPG distributors.
- **LPG must not be used** in **basement** kitchen or seating area **below ground level**.
- **Registered Gas Contractor** should be employed to carry out gas installation work.
- **Designated storage chamber** should be constructed in food premises using LPG cylinder.
- If sufficient natural ventilation or fresh air circulation could not be provided in the kitchen, a **mechanical exhaust system** should be installed.
- When the exhaust pipe of gas appliances is connected to a mechanical ventilation system, it should be equipped with an **interlocking device** to ensure that the mechanical ventilation system must be activated when using gas appliances.

# Summary

- Unless approved by the Gas Authority, **no person shall store LPG cylinder(s) with total nominal capacity of more than 130 Litres**. (Including LPG cylinder in use, spent LPG cylinder and LPG cartridge).
- Any flexible tubing and LPG cylinder low-pressure regulator **should be replaced before their expiry dates**.
- Any **Domestic Gas Appliance** to be used, including LPG cassette cooker, **must bear GU mark**.
- For **LPG cassette cooker** to be used by customers at dining area, such cooker **must bare GU mark**.
- **Safety inspection and maintenance** of gas installations should be conducted by Registered Gas Contractor **every 12 months**.



# Enquiry

Gas Standards Office

24-Hour Hotline : 1823

Email Address : [info@emsd.gov.hk](mailto:info@emsd.gov.hk)

More Information : [https://www.emsd.gov.hk/tc/gas\\_safety/index.html](https://www.emsd.gov.hk/tc/gas_safety/index.html)



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