

住宅式氣體用具 之安全 Domestic Gas Appliance Safety



services such as checking the safety and performance of your appliance and the gas supply system. It is recommended that a routine check/service be conducted at least once every 18 months.

Repairs should be arranged immediately whenever the appliance does not appear to be working properly. Do not use a gas appliance if you know or suspect any of the following:

- insufficient air for combustion
- inadequate flue
- inadequate ventilation
- gas escape
- faulty equipment

氣體用具的安裝

所有安裝和更換工程，都必須由註冊氣體工程承辦商僱用的註冊氣體裝置技工進行。詳情請參閱題目為「氣體裝置工程和註冊氣體工程承辦商」的單張。

Installation of Gas Appliances

All installation and replacement work must only be carried out by registered gas installers employed by registered gas contractors. For details, please read the leaflet entitled "Gas Installation Work and Registered Gas Contractors."

如需進一步資料，請向你的氣體供應公司查詢。你亦可致電政府熱線 1823 或瀏覽本署網頁 <http://www.emsd.gov.hk>。

For further information, please contact your gas supply company. You may also call the government hotline 1823 or browse the EMSD website:

<http://www.emsd.gov.hk>



7. 我應怎樣做，才可確保氣體用具操作安全？

答：用戶必須閱讀並遵守氣體用具的說明書所載指示。易燃物品要遠離氣體火燄，不可在無人看管下讓氣體用具點燃。

氣體用具必須妥善維修保養，確保無論何時，都處於最佳狀態。氣體供應公司或註冊氣體工程承辦商能提供例行維修保養服務，例如為你檢查氣體用具和供氣系統的安全及操作情況。用戶應每 18 個月最少進行一次例行檢查 / 維修。

每當發現氣體用具有不能正常操作的跡象，便應立即安排修理。若你知道或懷疑有下列情況，便不要使用氣體用具：

- 助燃空氣不足
- 排煙設備不足
- 通風不足
- 氣體洩漏
- 設備損壞



7. What can I do to make sure my gas appliances are operating safely?

Ans: Always read and follow the instructions that come with your gas appliance. Keep combustible materials away from gas flames and do not leave your gas appliances switched on without constant supervision.

Keep your gas appliances maintained in tip-top condition. Your gas supply company or registered gas contractor will be able to offer routine maintenance

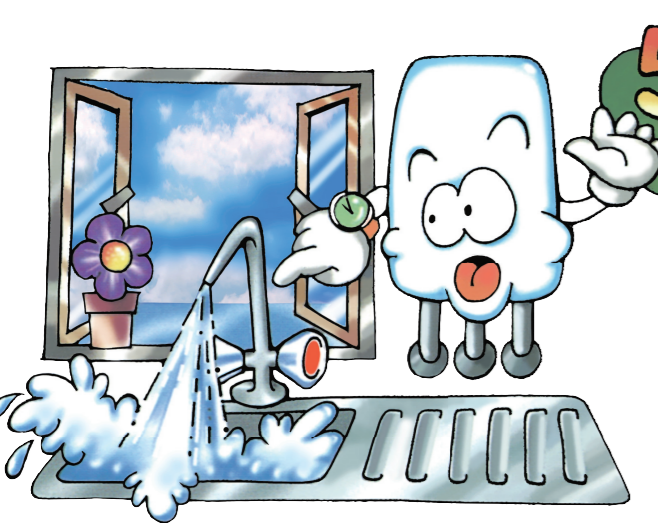
置是設於平頭爐、焗爐或其他爐具的保險裝置，這裝置如探測到再無火焰，便會截斷氣體供應。這種裝置亦可防止因小童或其他人意外開啟煮食爐具而引致之氣體洩漏。

6. Why should I choose cooking appliances with FFD?

Ans: Each year, many incidents of gas escape are caused by accidental extinguishment of cooking flames by sudden draughts or overboiling of liquids. A flame failure device (FFD) is a protective device incorporated into a hotplate, oven or other burner, which reacts by shutting off the gas supply when flame presence is no longer detected. It also helps prevent a cooking appliance from being switched on accidentally by a child or others.



5分鐘



prolonged use; insufficient ventilation; heater blocked, defective or inadequately maintained. It is dangerous that toxic carbon monoxide may be built up within the kitchen. This type of water heater must provide a warning label: "Do not use for more than 5 minutes continuously"

Some new models of flueless (sink) gas water heater has incorporated oxygen deficiency device. If oxygen level is below the average, it will cut off the gas supply. However, users should choose room-sealed sink gas water heater in order to minimize the opportunity for producing carbon monoxide.

It is an offence to connect a flueless (sink) gas water heater for supplying hot water for bath or shower purposes.

6. 為甚麼我應選購設有熄火保險裝置的煮食爐具？

答：每年由於煮食爐具意外熄火而引致氣體洩漏的個案甚多，這些意外包括突然風吹或液體溢流。熄火保險裝

這一系列的單張，是把氣體燃料安全的一些要點加以說明，這些要點是各位使用石油氣或煤氣的住宅用戶應該知道的。

This series of leaflets cover some important aspects of gas safety which the domestic consumers should know about when using LPG (liquefied petroleum gas) or Towngas.

住宅式氣體用具之安全

1. 我應選擇那種住宅式即熱氣體熱水爐？

答：密封式熱水爐（通常是對衡式）是新安裝及更換熱水爐時的最佳選擇。這種熱水爐會從戶外直接抽取供燃燒用之新鮮空氣，而燃燒後之廢氣亦會直接排出戶外（即室內密封式），因此，熱水爐不會消耗或污染室內的空氣。如樓宇內已預留合適的煙道牆孔，以備安裝密封式氣體熱水爐供浴室使用，用戶在該樓宇內安裝任何其他種類的氣體熱水爐，即屬違例。密封式熱水爐備有多種型號，其中包括機動排煙式型號，以供選擇。這種熱水爐在大多數情況下均易於安裝。

Domestic Gas Appliance Safety

1. What type of domestic instantaneous gas water heater should I choose ?

Ans: Room-sealed (balanced-flue) gas water heaters are the first choice for new and replacement installations. Fresh air for combustion and combustion products are taken from and discharged directly to outside air (i.e. sealed against the room), and the heater will not consume or contaminate the air in the room. In

a premises where a suitable flue aperture has been provided for the installation of a room-sealed gas water heater to serve a bathroom, then it is an offence to install any other type of gas water heater in the premises. Room-sealed heaters are available in different models including fanned draught models, and can be installed easily in most situations.

2. 那種氣體熱水爐裝置是「不合標準」的？

答：a. 普通煙道式（自然排煙）氣體熱水爐

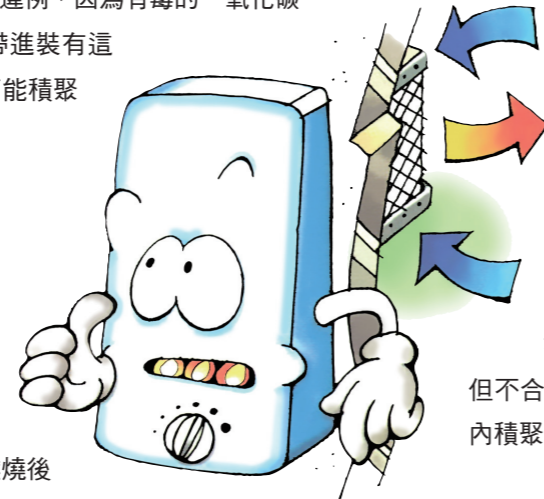
現時安裝任何普通煙道式（自然排煙）氣體熱水爐，即屬違例。

b. 供水給浴室的無煙道式（洗滌盆）氣體熱水爐

無煙道式（洗滌盆）氣體熱水爐的設計只適宜用於廚房洗滌盆（例如間歇供應熱水作洗碗碟之用）。無煙道式（洗滌盆）氣體熱水爐如用以供應熱水作沐浴用途，便屬不合標準的裝置，並屬違例，因為有毒的一氧化碳會由燃燒後之廢氣直接帶進裝有這類熱水爐的房間內，並可能積聚至危險水平。

c. 在室內安裝的無煙道式（戶外）氣體熱水爐

無煙道式（戶外）氣體熱水爐如安裝於室內，便屬不安全的裝置，並且非常危險，因為大量燃燒後之廢氣會排出到裝有這類熱水爐的房間內。在本港，這類熱水爐已被淘汰，用戶不可再安裝這類熱水爐。



2. What types of gas water heater installations are "substandard" and should not be used ?

Ans: a. Open-Flued (Natural Draught) Gas Water Heaters

It is now against the law to install any open-flued (natural draught) gas water heater.

b. Flueless (Sink) Gas Water Heaters supplying Bathrooms

It is against the law to install a flueless (sink) gas water heater for bath or shower purposes. Flueless (sink) gas water heaters are designed only for kitchen sink use (e.g. washing dishes intermittently). They are considered dangerous if used to supply hot water to a bath or shower, because the products of combustion containing toxic carbon monoxide discharge directly into the room where the heater is situated, and may build up to dangerous levels.

c. Flueless (Outdoor) Gas Water Heaters Installed Indoors

Flueless (outdoor) gas water heaters are substandard and very dangerous if they are installed indoors, because large amounts of combustion products are released directly into the room where the heater is situated. They are now obsolete in Hong Kong and are not allowed to be installed.

3. 為甚麼使用不合標準的裝置會不安全？

答：主要的危險是吸入了有毒的一氧化碳。所有氣體熱水爐均會產生含有一氧化碳的廢氣，但不合標準的裝置可能會由於各種原因，突然導致室內積聚高水平的一氧化碳，以致造成危險。

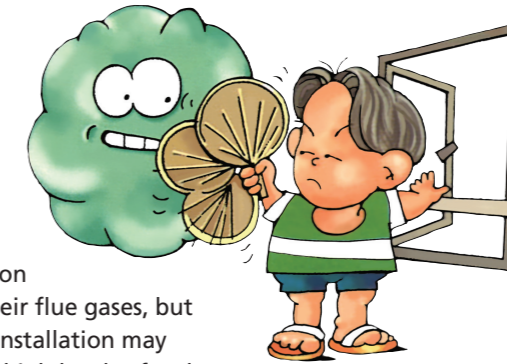
一氧化碳是有毒氣體，由於一氧化碳無色、無臭及無味，令人猝不及防，故稱為「無形殺手」。一般來說，空氣中只要含有 0.4% 的一氧化碳，便足以令人在數分鐘內

失去知覺及死亡。一個有問題的氣體熱水爐，有可能在極短時間內產生這個數量的一氧化碳。

3. Why is it unsafe to use a substandard installation ?

Ans: The main danger is from carbon monoxide (CO) poisoning. All gas water heaters are capable of producing carbon monoxide in their flue gases, but a substandard installation may suddenly cause high levels of carbon monoxide to be built up indoors for many reasons.

Carbon monoxide is a toxic gas. It is a colourless, odourless and tasteless gas, and its presence is undetectable, therefore being called as "Silent Killer". As little as 0.4% concentration of carbon monoxide in the air can cause unconsciousness and death in a few minutes. A defective gas water heater may be able to produce this amount in a very short time.



4. 我可以安裝普通煙道式（機動排煙）氣體熱水爐嗎？

答：除了用作替換在 1994 年 1 月 1 日之前安裝在浴室內的普通煙道式（機動排煙）氣體熱水爐外，現時在浴室安裝這類氣體熱水爐，即屬違例。



4. Can I install an Open-Flued (Fanned Draught) water heater ?

Ans: It is now an offence to install this type of gas water heater in a bathroom, except for replacement of another open-flued (fanned draught) water heater which was installed in a bathroom before 1 st January 1994.

5. 在廚房使用無煙道式（洗滌盆）氣體熱水爐是否安全？

答：保養得宜的無煙道式（洗滌盆）氣體熱水爐，如連續為廚房洗滌盆供應熱水不超過 5 分鐘，而且室內設有足夠的通風設備，一般來說是安全的。不過，如這種熱水爐在以下情況操作：長時間使用，沒有足夠通風，熱水爐受阻塞、損壞或保養欠佳，廚房便會有積聚有毒一氧化碳的危險。這種熱水爐必須貼上以下警告字句：“不應連續使用熱水爐超過 5 分鐘”。

有些新型號的無煙道式（洗滌盆）氣體熱水爐已裝有缺氧感應器，如感應到氧氣的水平過低，便會截斷氣體供應。不過，用戶應盡可能選購密封式洗滌盆氣體熱水爐，以盡量減低接觸一氧化碳的機會。

如接駁無煙道式（洗滌盆）氣體熱水爐以供應熱水作沐浴用途，即屬違例。

5. Is it safe to use flueless (sink) gas water heaters for the kitchen ?

Ans: It is generally safe to use properly maintained flueless (sink) gas water heater for the kitchen provided that it is not used more than 5 minutes continuously and sufficient ventilation within the premises is provided. However, if the heater is operated under the following conditions: