

Using Toughened Glass in Cooking Appliances

Toughened glass, also known as tempered glass, is one of two types of glass used for the glass tops of gas and electric hobs and viewing doors of ovens. Toughened glass is preferred by manufacturers over typical borosilicate glass for a few reasons. It lasts longer, has more uses and is more impact and heat resistant.

Contrary to popular belief, toughened glass is not unbreakable.

Toughened glass may shatter for various reasons:

- Improper installation which causes undue stress to the glass
- Damage to the outer surface of the glass
- Overloading on the glass
- Presence of impurities such as Nickel Sulphide
- Changes in atmospheric conditions



Shattering may occur in the midst of cooking or long after cooking has been completed. In the event of shattering, toughened glass implodes rather than explodes. As a result, small blunt pieces are produced with little risk of injury to the user. Read on to find out how to prevent glass shattering incidents and keep your family safe!

Safety Tips to Prevent Shattering of Toughened Glass in Cooking Appliances

Buy gas hobs and ovens that have the SAFETY Mark.



During Installation:

- Engage a licensed gas service worker for the installation of gas appliances
- Avoid operating the cooking appliances with gas other than those specified by the manufacturer
- Ensure that gas hobs are firmly placed on top of the cabinet or stove top
- Avoid fastening the toughened glass top to the cabinet or stove top with silicone cement, tiles or other materials as this restricts the expansion of glass, increasing the risk of shattering

Before Use:

- Read the user's instruction manual
- Avoid covering the toughened glass top with aluminum foil or other materials
- Ensure that the burner is not enclosed as this will concentrate and deflect heat onto the gas hob
- Ensure that only the pan support supplied or recommended by the manufacturer is used and that it is in the correct position

During Use:

- Avoid placing anything (e.g. flame tamer) between the pan and pan support
- Avoid using oversized cooking utensils or overloading the cooking appliance

- Avoid damaging the outer surface of the glass with heavy or sharp objects
- Report any irregularity, defect or damage (clogging, gas leakage, chip or crack) to the authorised agent or service centre immediately. Engage only authorised and qualified service personnel for any servicing or rectification matters

After Use:

- Clean gas hob regularly to avoid clogging of the burners. Do not remove any parts of the cooking appliances other than those recommended in the user's manual.

What to do if toughened glass shatters

- Remain calm
- Clean up glass fragments and keep them out of reach of children
- Check if the product is still under warranty
- Contact your authorised agent for replacement of the glass
- Report the incident to SPRING Singapore at safety@spring.gov.sg