

Information Sheet No 18

IS THE WALL BEHIND THAT *DOMESTIC COOKING EQUIPMENT* NON-COMBUSTIBLE?

Don't be fooled by stainless steel or toughened glass

Introduction

From time to time, serious incidents have occurred where a fire has started in a wall behind domestic cooking equipment. In such incidents the equipment was usually located to close or directly against a wall, thought by the installer to be non-combustible because it was covered with toughened glass or stainless steel. Over time, heat passing through the toughened glass or the stainless steel caused material within the wall to ignite.

Walls that appear to be non-combustible, and those covered with toughened glass or sheet-metal must be checked to ensure that if they are combustible, adequate protection using non-combustible material is used. In the case of domestic cooking, covering a combustible wall surface, such as plasterboard, with toughened glass or sheet metal will not provide heat protection.

In a situation where the wall has already been constructed it may be necessary to refer to the building structural drawings to determine the materials used.

Clearance to a combustible surface

Domestic cooking equipment must never be installed directly against a combustible wall unless the appliance installation instructions clearly allow it. Always check the instructions and the clearance requirements of AS 5601 - *Gas Installations*.

Some appliance manufacturers require that an air gap be maintained at the rear of an appliance for cooling purposes. Relevant details given in the appliance installation instructions regarding such air gaps must be observed. The airflow must not be obstructed.

Combustible surfaces – temperature limitation

AS 5601– *Gas Installations*, contains an over-riding clause that limits the temperature of any nearby combustible surface. Reference clause 5.12.1.2:

“The protection required by Clause 5.12.1.1 shall ensure that the surface temperature of the combustible surface does not exceed 65°C above ambient”.

Protection of combustible materials

Walls containing or constructed from combustible materials such as timber or plasterboard can, if necessary, be protected.

Any vertical combustible surface that is within 200mm of the periphery of the nearest burner shall be protected in accordance with Clause 5.12.1.2 to a height of not less than 150mm above the hob for the full width or depth of the cooking surface area

Methods covered under Clause 5.12.1.2 is the fixing of ceramic tiles to the surface or attaching fire resistant material that complies with the requirements of AS 5601 with an outer covering of sheet metal (e.g. stainless steel) or toughened glass.

Stainless steel –

The wall must not contain combustible materials; or

The surface of the wall is to be protected as per AS 5601/AG601, Clause 5.12.1.

Toughened glass –

A letter is to be supplied by the architect, designer, glass supplier or glass manufacturer indicating that the glass is fit for purpose at the clearance stated; and

If the glass is affixed to a combustible surface, that surface is to be protected as per AS 5601/AG 601, Clause 5.12.1.

Notes:

The intent of (b) may be met if documentation is provided to the effect that the fixing method will ensure the temperature of the combustible surface will not exceed 65oC above ambient during normal operation.

For other additional requirements and overhead clearances refer to AS 5601
FIGURE 5.1. Required clearances around domestic cooking appliances

If further information is required, please contact Gas Standards *and* Safety
on 1300 366 322

Gas Standards and Safety wish to acknowledge the information provided by the Victorian Office of Gas Safety to assist in the preparation of this Information Sheet.