

Gas Information Sheet No. 15

Is the wall behind that commercial catering equipment non-combustible?

Don't be fooled by stainless steel or tiles

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

Walls that appear to be non-combustible and those covered with ceramic tiles or sheet metal must be checked to ensure that they are not constructed internally or externally from combustible materials. In the case of commercial catering equipment covering a combustible wall surface, such as plasterboard, with ceramic tiles 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 structural drawings to determine the materials used.

Table C1 of Appendix C of AS/NZS 5601.1 does not apply to commercial installations.

The new Table C1 in Appendix C applies to protection of domestic installations only. This table is not considered to be equivalent to fire resistant material and is not acceptable for commercial installations.

Health Regulations — important reminder!

Always check that the installation of commercial catering equipment will comply with local health authority regulations and requirements.

Clearance to a combustible surface

Commercial catering equipment must never be installed directly against a combustible wall. Always check the instructions and the clearance requirements as specified in AS/NZS 5601 Gas Installations. Some catering equipment manufacturers require that an air gap is 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 air flow must not be obstructed. Flashings must not be installed between the appliance and an unprotected rear wall as this will obstruct air flow causing potential overheating to occur. It may be necessary to fit a spacer between the appliance and the wall to ensure the air gap is maintained at all times. Never remove a spacer fitted by the appliance manufacturer.

Clause 6.2.5 Combustible surfaces — Temperature limitation, in AS/NZS 5601 Gas Installations, contains an over-riding clause that limits the temperature of any nearby combustible surface. It states:

A gas appliance shall be installed such that the surface temperature of any nearby combustible surface will not exceed 65 °C above ambient.

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Walls containing or constructed from combustible materials such as timber or plasterboard can, if necessary, be protected. One method is to use a fire resistant material that complies with the requirements of AS/NZS 5601 Gas Installations. (See Gas Information Sheet No 3 fire resistant board on the ESV website). An outer covering of ceramic tiles or sheet metal (such as stainless steel) can then be applied to comply with local health authority regulations and requirements. See Figure 1.

Note: Where tiles are chosen, it may be necessary to lay them on to ceramic tile sheeting because tile adhesive may not adhere to fire resistant board. The tile sheeting is additional to, not instead of, fire resistant board.

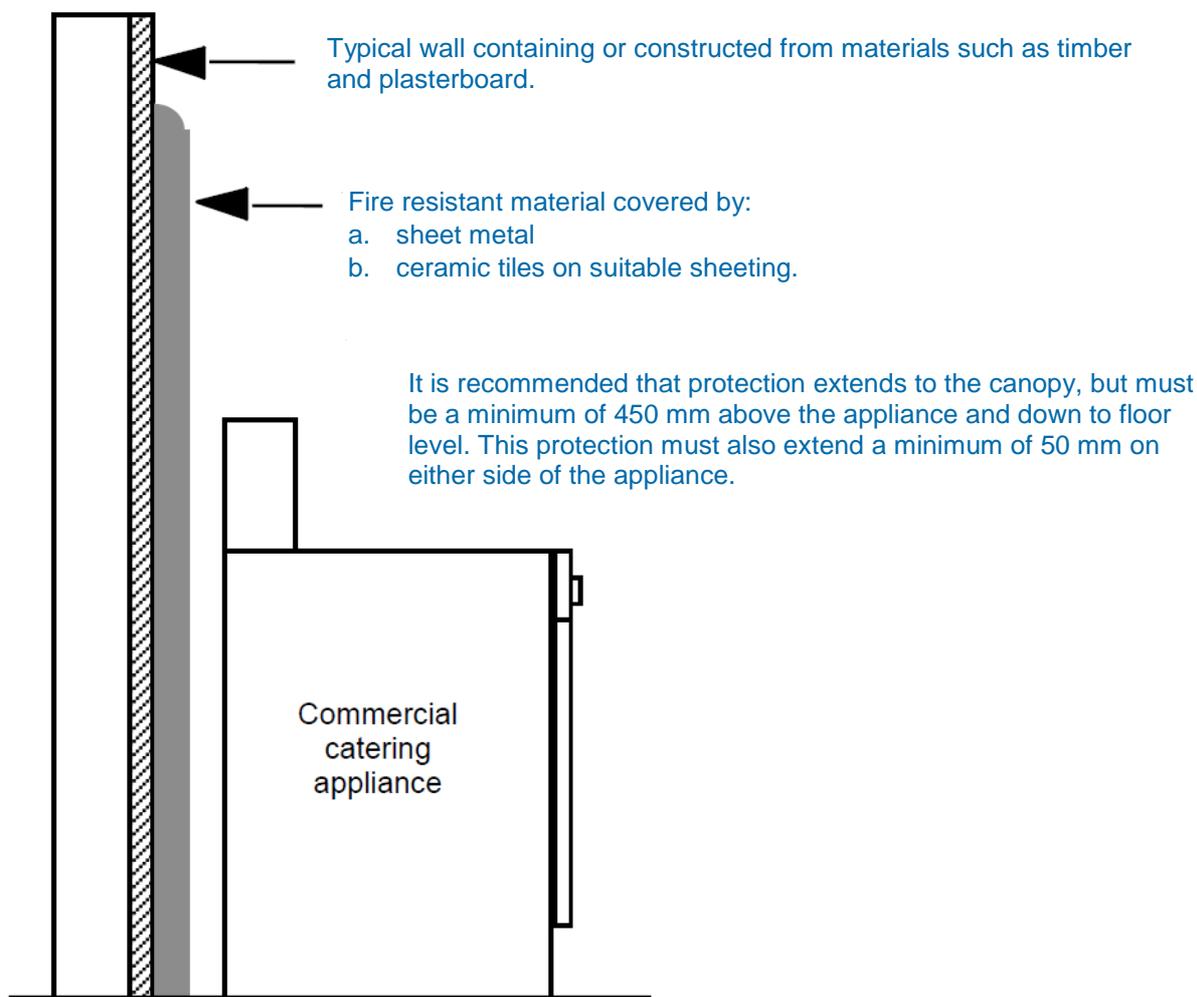


Figure 1. Example of protecting a combustible wall

If further information is required, please phone the Gas Safety Technical Information Line on 1800 652 563.