

Gas Information Sheet No. 15

Non-combustible walls and commercial catering equipment



This gas information sheet provides information about the walls behind commercial catering equipment, which must be checked to ensure they are not constructed from combustible materials, because covering a combustible wall with plasterboard, ceramic tiles, or sheet metal will not provide sufficient heat protection.

Where fires have started behind commercial catering equipment, it has usually been located directly against a wall the installer thought was non-combustible because it was tiled or covered with stainless steel. Over time, however, the heat passing through the 'non-combustible' outer covering caused the material within the wall (for example, timber studs and noggings) to ignite.

For an existing installation, when replacing an appliance it may be necessary to protect the wall, provide sufficient clearances, or confirm the materials used are suitable.

What if fire resistant material is being installed?

If fire resistant material is being installed, then ESV will require written confirmation (referred to as a Fire Resistant Board Statement) from the manufacturer stating that "The material complies with the requirements of AS/NZS 5601.1, Appendix C".

This statement must:

- be written on the board manufacturer's or supplier's letterhead
- identify the fire resistant board's proprietary name
- state the board's:
 - thickness
 - load bearing or non-load bearing nature
 - compliance with the requirements of AS/NZS 5601.1, Appendix C.

Are there alternative means to comply?

Alternative means to comply include installing gas appliances in accordance with the Standard AS/NZS 5601.1 clearance requirements, or the appliance manufacturer's installation instructions, whichever is the greater.

Walls behind commercial catering equipment – dos and don'ts

Some general rules about walls behind commercial catering equipment include the following:

- Always check the gas appliance manufacturer's instructions and the clearance requirements as specified in AS/NZS 5601.1, clause 6.10.2.3.
- Always follow the gas appliance manufacturer's instructions if an air gap is required, and ensure the air flow behind the equipment is not obstructed.
- Never install commercial catering equipment directly against a combustible wall.
- Never install flashings between an appliance and an unprotected rear wall as this can 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.

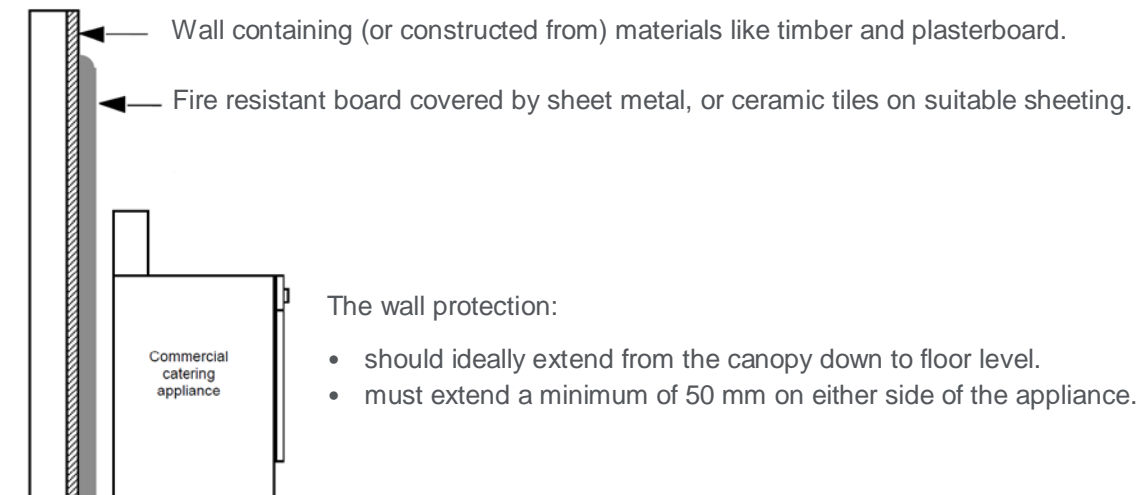
AS/NZS 5601.1, Clause 6.2.5, Temperature Limitation on nearby Combustible Surfaces, limits the temperature of any nearby combustible surface to 65 Celsius (above ambient) or less.

How can you protect walls containing (or constructed from) combustible materials?

One method for protecting walls containing (or constructed from) combustible materials like timber and plasterboard:

1. Use a fire resistant board that complies with the requirements of AS/NZS 5601.1, Appendix C as the base.
2. Apply an outer covering of ceramic tiles or sheet metal (like stainless steel) to comply with local health authority regulations.

(See the following diagram for a guide.)



It may be necessary to lay tiles onto 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.

Does AS/NZS 5601.1, Appendix C, Table C1 apply?

AS/NZS 5601.1 Gas Installations Part 1: General Installations, Appendix C, Table C1 only applies to domestic installations and not commercial ones.

Further information

Contact ESV's Technical Information Line on 1800 652 563, or email gastechnicalenquiry@energysafe.vic.gov.au

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