

# Multilayer piping - restrictions and limitations

## Gas Bulletin #60

Issued November 2023

On 31 March 2023, **AS/NZS5601.1 - 2022 gas installation standard** (the standard) was adopted and implemented in South Australia, enforcing new requirements for multilayer (composite) pipe installations.

*Note: This bulletin discusses limiting conditions and restrictions for composite pipe. For the requirements for fire emergency isolation for multilayer pipe in residential Class 1a buildings, please refer to [Gas Bulletin 57](#).*

### Restriction on appliance connection

**Clause 6.6.1 Restriction on appliance connection** - composite piping must terminate at least 1 metre from the nearest part of a gas appliance (including flue systems) or a greater distance if needed to prevent heat damage radiating from an appliance.

For example, if a composite dropper or lateral pipework is running to an appliance, it must transition to a metallic pipe at least 1 metre from the nearest part of the appliance.

Simply put, there is now a 1 metre exclusion zone around gas appliances for composite pipework. Only metallic pipe can be used within 1 meter of a gas appliance.

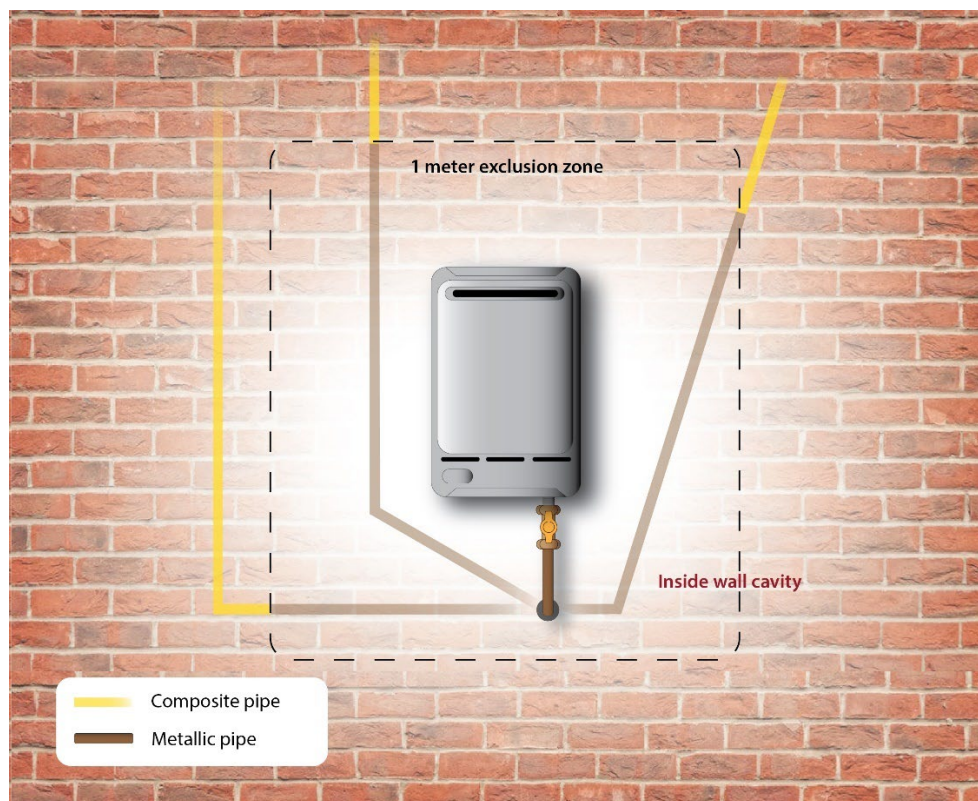
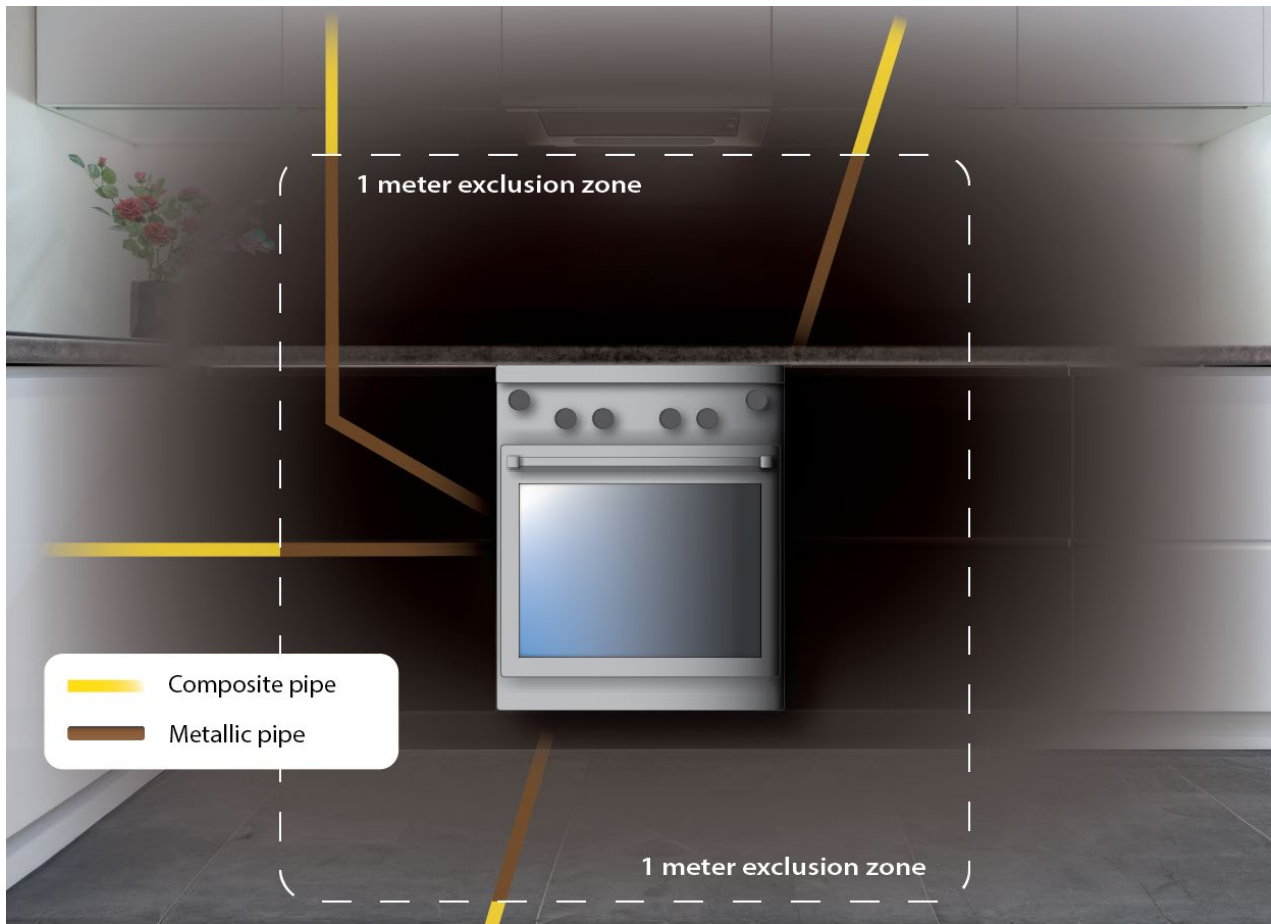


Diagram showing compliant 1 metre separation between an external gas appliance and composite piping.



*Diagram showing compliant 1 metre separation between an internal gas appliance and composite piping.*

In some instances, it may be difficult to tell if the required 1 metre separation will be achieved after the 2<sup>nd</sup> fix installation. In this case the OTR recommends at the 1<sup>st</sup> fix stage, installers transition from composite pipe to metallic pipe in the ceiling cavity and run either a galvanised steel or copper dropper down to the appliance connection point.

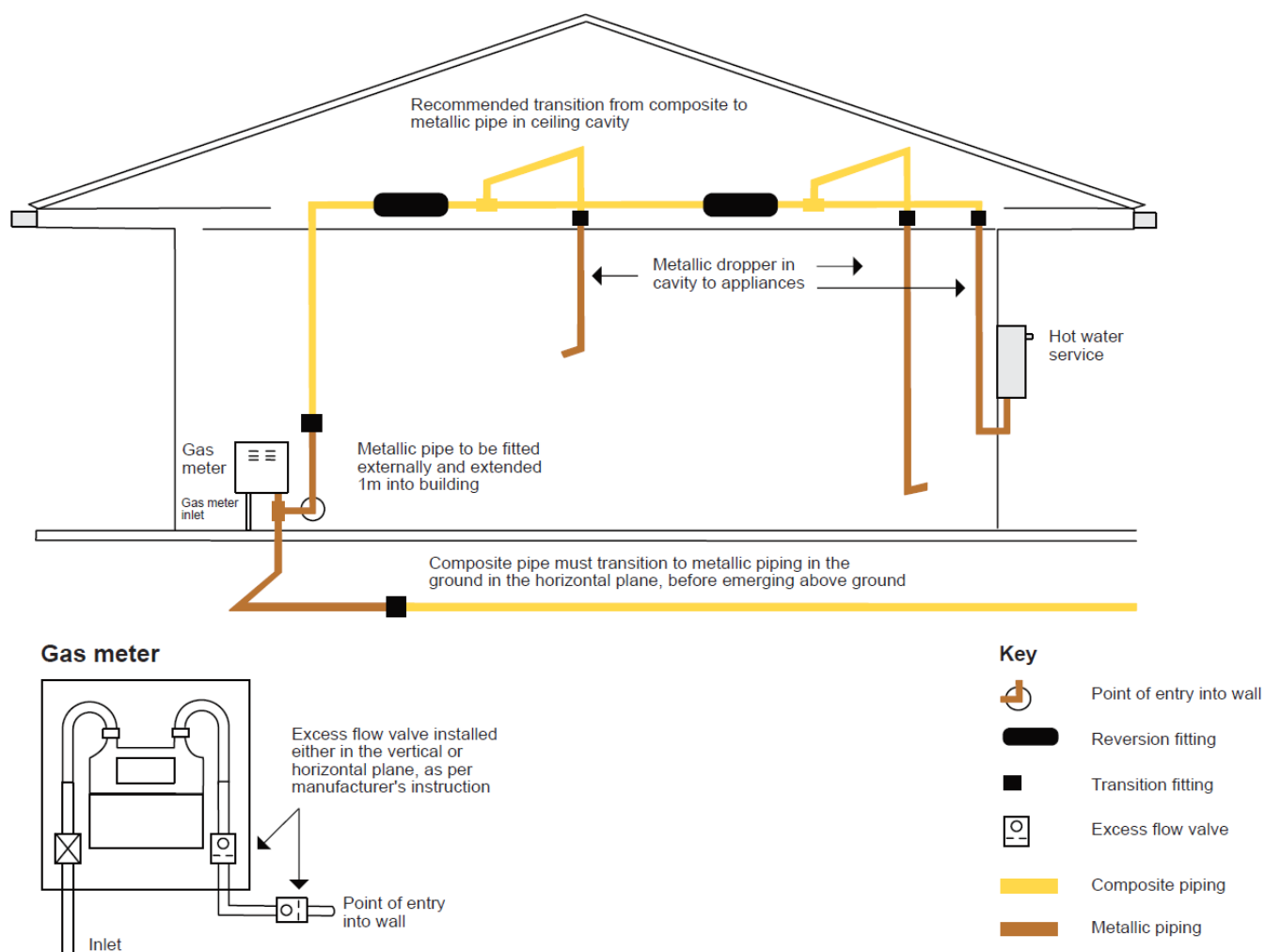


*Recommended compliant metallic droppers from the ceiling cavity to the appliance connection points.*

## Limiting conditions for composite piping

*Table 4.2 – Consumer piping materials* states composite piping can no longer be installed above ground external to a building. All consumer piping external to the building must be metallic and must extend at least 1 metre inside the building before transitioning into composite piping. From a gas meter box and LPG cylinder installation, the metallic pipework must extend at least 1 metre inside the cavity.

Brazing, welding, or annealing cannot be conducted on piping within 1 metre from composite pipe and any other joint with non-metallic components.



**Note:** Marker tape must be laid above composite pipe when installed in an open trench, the tape must be between 150mm and 300mm between the finished ground surface.

*Diagrammatical representation of composite piping installation compliant with Table 4.2 and Clause 6.6.1.*



## Non-compliance with the Gas Act

The images below show non-compliant 1<sup>st</sup> fix composite piping installations. Composite pipe has been run directly to gas appliance connection points, which means composite piping will be within the 1 metre exclusion zone around gas appliances.

**Gas fitters will be required to return and rectify any non-compliant installations, under *Section 56 of the Gas Act*. Expiation fees/fines may also apply.**



## Further information

If you have any questions or need assistance, please use the contact information in the footer below.

Contact the Office of the Technical Regulator for more information

Online     [otr.sa.gov.au](http://otr.sa.gov.au)  
Email     [otr@sa.gov.au](mailto:otr@sa.gov.au)  
Phone     8226 5722



**Government of  
South Australia**