

August 2022 - Revision 4: This issue supersedes all previous issues

# Exhaust from wood and oil fire burners

### Introduction

The fallout from boilers and heaters using wood and oil for fuel can be unsightly and, if neglected, damage the surface on which it falls. While it is not always possible to prevent this happening, it can be reduced by locating the flue or exhaust in a position where prevailing winds would blow the fallout clear of the roof. It is most important to ensure that the height of the flue is sufficient to create a good draft which will also result in reducing the concentration of the fallout on the roof.

The design of the flue must meet the appropriate Australian/New Zealand Standard AS/NZS 2918:2018 *Domestic solid fuel burning appliances – Installation* and meet appropriate local government building ordinances.

Corrosion arising from deposition from incorrectly designed flues has been found to be related to grossly elevated concentrations of sulphurous products, wood acids and resinous combustion products which have condensed directly from the flue gas. This has been found to be related to fuel type, and/or inappropriate flue design.

Burning green hardwood, resinous soft woods, low grade coal or oils with a high sulphur content can all result in greater quantities of fallout which contain corrosive substances.

Where the skin temperature of the flue is low due to poor design or the use of single tube flue systems, cooling of the flue gas will occur. This results in precipitation of the flue gas components and deposition of the heavier particles on the roof surface adjacent to the flue.

## **Referenced Australian Standards**

AS/NZS 2918:2018 - Domestic solid fuel burning appliances - Installation

# steel.com.au

To ensure you have the most current information

1800 800 789 steeldirect@bluescopesteel.com For more information contact Steel Direct



The information and advice contained in this Technical Bulletin ('Bulletin') is of a general nature only and has not been prepared with your specific needs in mind. You should always obtain specialist advice to ensure that the materials, approach and techniques referred to in this Bulletin meet your specific requirements. BlueScope Steel Limited makes no warranty as to the accuracy, completeness or reliability of any estimates, opinions or other information contained in this Bulletin and to the maximum extent permitted by law, BlueScope Steel Limited disclaims all liability and responsibility for any loss or damage, direct or indirect, which may be suffered by any person acting in reliance on anything contained in or omitted from this Bulletin. BlueScope and the BlueScope brand mark are registered trademarks of BlueScope Steel Limited. © 2022 BlueScope Steel Limited ABN 16 000 011 058. All rights reserved.

#### Figure 1: Flue Deposition/Corrosion

