

Condensafe+

Condensate Neutraliser for Domestic Condensing Boilers

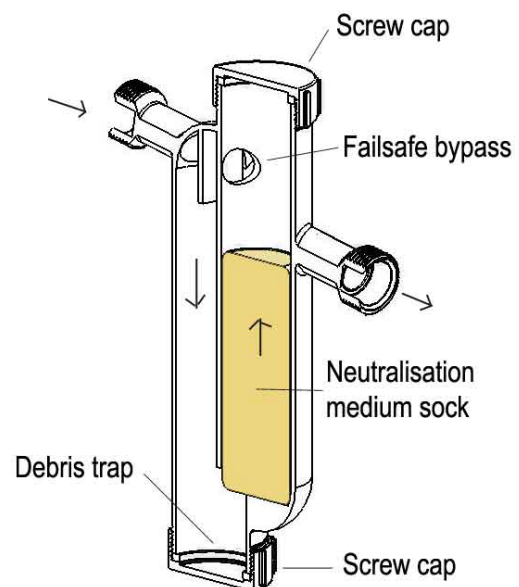
Features and Benefits

- An in-line, simple to install unit
- Unique, innovative design*
- Fits all types of condensing boilers
- Effectively neutralises acid waste
- Does not interfere with boiler operation or discharge of condensate from boiler
- Does not block
- Stops harmful acid going down the drain
- Easily replaceable refill – no need to discard entire unit.
- Easy clean & maintenance
- Makes condensing boilers more environmentally friendly
- Complies with BS6798:2009 and all other similar standards.

Introduction

In condensing boilers, high efficiency is achieved by using waste heat from the hot flue gases to pre-heat the water in the boiler instead of just being exhausted through the flue. However, in doing so an acidic condensate is formed which is often simply discharged into the normal domestic drain. An average domestic condensing boiler may

produce 800 litres of acid per year at about pH 4.0, which adds up to millions of litres of acid discharged nationwide and the trend is growing. Today, guidance in many countries requires that effluent is discharged to municipal sewers and water courses at between pH 6.5 and pH 10.0. This is to protect micro-organisms used in the biological purification processes in the septic tank or in the local water treatment plant, to lessen damage to the infrastructure of the drainage system and to help protect the environment as a whole. However, the effect of acidic condensate discharge is usually overlooked and needs to be addressed.

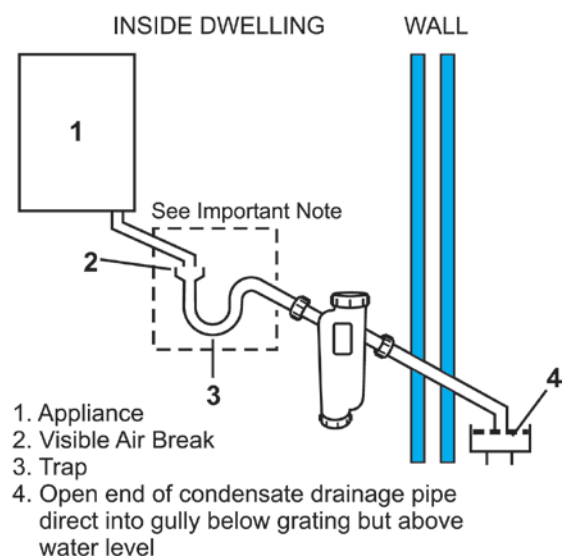


Description and Use

Salamander Condensafe+ is an in-line unit containing a special medium that will neutralise the acidic waste from condensing boilers. Its innovative design* incorporates several unique features.

- The flow of condensate through the unit is manipulated to achieve optimum contact with medium ensuring effective neutralisation.
- The unit does not restrict either the flow of condensate nor air through the discharge pipe and therefore is compatible with both constant (trickle) and periodic (siphon) modes of condensate discharge.
- The unit also incorporates a trap to capture any debris washed into it from upstream with easy screw-cap access at its base to allow occasional cleaning.
- In the unlikely event of flow being restricted by debris in the unit, Condensafe+ has a failsafe bypass channel ensuring that condensate flow cannot be blocked and backed up to the boiler.
- The neutralisation media within the unit is contained in its own neutraliser bag. During the yearly boiler service, this neutraliser can be easily extracted and replaced by a refill bag via a second screw-cap access point at the top of the unit. This means that, unlike some other products, the entire unit does not have to be replaced when the neutralisation media is exhausted.

The boiler installation should be in accordance with the manufacturer's installation instructions and should comply with BS 6798. A typical arrangement is shown schematically.



Important note: Visible air break (2) and trap (3) are not required if there is a suitable trap for the installation type incorporated within the boiler (BS 6798).

Condensafe+ neutralising material eventually becomes exhausted to maintain optimum performance of the unit, the replaceable neutraliser bag should be renewed during each annual boiler service.

*Condensafe+ is the subject of Patent Application 0821908.1
Condensafe+ is also protected by European Community Design registration number 001052765-0001