

5. A DIY drain-down by the homeowner

Draining down holiday homes looks relatively easy and many owners are tempted to give it a go with varying levels of success. The following points should be taken into account:

- only the draincocks for the freshwater system should be opened. The central heating draincocks must be left closed and are nearly always situated under the home and directly below the combi boiler

- holiday home designs/manufacturers have differing numbers of draincocks in differing locations. Finding all the draincocks (up to four) may require a good read of the owner's manual

- shower mixer valves have double check valves fitted that stop the flow of water around the system once the draincocks and taps are open. It may appear that all the water has left the system, but beware! This pitfall can be avoided by removing the shower mixer valve/s from the system after the cold water supply has been switched off and the draincocks opened. Many manufacturers provide access panels and these may make the removal of shower mixers easier. Removal of some shower mixers requires the use of special tools

- pipework layouts can cause air locks leaving water inside vulnerable components such as the boiler.



The middle two draincocks are for hot and cold water (there may be others elsewhere!). The outer two draincocks are for central heating and should not be opened.



This manufacturer has helpfully labelled the central heating draincocks.

6. Leaving the heating system on all winter even though the holiday home is empty

Leaving the central heating on when the caravan holiday home is empty over the winter while being controlled either by a room thermostat or the time clock on the combi boiler is a poor option for the following reasons:

- it will use a great deal of gas and the bottles may run out before the end of winter

- heating the inside of the home will not benefit the freshwater pipe system as this is under the home

- parks often switch off all electric supplies during the winter months so the heating will not work.

7. Relying on the built-in 'frost stat' within the combination boiler

Most combination boilers have a 'frost stat' fitted. For this to work, the combi must have an uninterrupted electrical and gas supply throughout the winter and the control knobs switched to the off position. The timer can be left in any position. The combi senses the temperature is dropping and will operate the central heating pump in isolation or in combination with firing the boiler. In more modern combis, the display window will show 'F' to indicate the frost stat is operating.

Questions can arise over the noise of the pump running in frost protection mode as many holiday homeowners believe the boiler to be faulty. A frost stat will protect the central heating circuit only. This will have little or no positive effect on protecting the freshwater system including the part of the combi that contains fresh water. If the boiler experiences any problems during the winter, such as low system pressure or a component failure, the frost protection system will not operate.

8. Filling the potable freshwater system with antifreeze

There have been a number of frost protection products that involve the introduction of antifreeze into the freshwater system. We are unaware of any system that would be approved by WRAS. Morco wholeheartedly endorses the guidance previously published:

'Products such as Frostguard have been advertised as an alternative to draining down systems in holiday homes to avoid damage by freezing. However, such dosing fills the whole system, including drinking water taps, with a diluted solution of antifreeze. This poses a serious threat to health and is illegal. Therefore WRAS has advised the park owners that it would breach the law for an antifreeze device to be attached to the plumbing system, even temporarily. This applies regardless of the use of any form of backflow prevention devices (such as check valves or non-return valves), and even if the water supply pipe is temporarily disconnected while the chemicals are added.' ➤