

HEATBASE Ltd FACTSHEET 35

Oil Supply line and associated components

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If your Installation has been marked as N.C.R. "Not to Current Regulations" or any part of the Installation has been marked as "Fail" or a warning sticker has been issued or you have been informed that there is either a potential or immediate risk, please read the following:

An Oil supply line should contain some (or all) of the following components:

Tank isolation valve: Fail (NCR) and Potential Safety and Environmental Risk if not fitted or does not turn off.

Working, compliant and correctly installed contents gauge: If a sight tube is fitted its tube should be in good condition have a cap enclosing the open end of the tube, be securely supported and must have either a spring-loaded isolation valve or be left in closed position for the supply to the tube which should prevent the loss of fuel if the gauge becomes damaged. (Integrally banded oil tanks must not have external sight tubes fitted). Fail (NCR) and Potential Environmental Risk if not fitted, fitted incorrectly or not working.

Tank Oil filter: The preferred method of installation is to install an oil filter close to the outlet of the oil tank to ensure a clean supply of fuel and also to prevent the possibility of the oil supply line becoming blocked or restricted before the fuel can be cleaned at an oil filter fitted away from the Oil tank. It must be positioned in a manner to allow the removal of the bowl for cleaning or replacement of the filter. If the bowl cannot be removed due to insufficient space beneath it, or if the bowl is seized into place, or if the bowl is partially buried or touching the base or ground it is a Fail (NCR) and a Potential Environmental Risk.

Oil supply lines: Oil supply lines should be located and constructed so they are reasonably protected from fires which may occur in buildings or beyond boundaries. They are normally run in plastic coated annealed copper and some approved types of plastic pipe. The preferred method of installation is to install the oil line above ground and not to bury it. Soft soldered fittings must not be used, nor should galvanised fittings as they can cause electrolytic corrosion of dissimilar metals. Exposed oil lines should be fixed to a permanent rigid structure such as brick walls and not to non-permanent structures such as fences and sheds. Uncoated copper and screwed steel pipe should be secured to hold the pipe work and components away from the corrosive elements of the structure e.g. Mortar and masonry. Buried pipe work must be installed in compliance with OFTEC guidelines. Approved plastic oil line (even if installed within a protective sleeve) is only approved for use if it is installed below ground as it is not UV stable, is easier to damage and is not resistant to fire. Therefore, any buried pipework that is not installed to OFTEC standards or any visible exposed section of pipe that does not meet the above criteria will be classed as a Fail (NCR) and also as a Potential Safety and/or Environmental Risk.

Component Isolation Valve: An additional isolation valve should be fitted to the oil line prior to any combination of or any additional oil filter, remote sensing fire valve or De-aerator to reduce the possibility of oil spillage. Fail (NCR) if not fitted and Potential Environmental Risk.

Additional fuel filter: Although only required if there is no (or an inadequate) form of filtration at the oil tank; any additional filter must be fitted correctly and be accessible. Fail (NCR) if fitted incorrectly, touching masonry, buried in ground or inaccessible, this would also constitute a Potential Environmental Risk.

Remote sensing fire valve: Any Oil-Fired Appliance fitted after 1st April 2002 must incorporate a remote sensing fire valve to shut off the oil supply outside the building (or occasionally inside, immediately where the oil line enters) in the event of a fire. It should have a separate "sleeve" through wall, so a faulty unit can be replaced. External boilers also require a remote sensing fire valve and it should be fitted/installed in such a manner that the oil shuts off outside of the appliance casing and preferably 1 metre away. Fail (NCR) and Potential Safety Risk if not fitted, not working, or fitted incorrectly; or if the owner declines testing of the fire valve. If an electronic fire valve is used and is fitted to a vaporising appliance; Fail (NCR) and Potential Safety Risk. See Factsheet 36 Fire Valves for more information.

De-aerator: Fitted to boilers if the oil tank is lower than the burner, a two-pipe system can be used instead; although a de-aerator is the preferred method. If fitted (or the vent from an approved internal de-aerator terminates) within 500mm of a flue terminal or installed below the flue of a condensing boiler, or if installed inside a building (unless an internal de-aerator is used). Fail (NCR) and also Potential Safety and/or Environmental Risk

Oil lifter: Usually fitted with vaporising appliances when there is insufficient head of pressure from the tank. They should be fitted externally in a weather proof compartment, or internally in a sealed heat resistant compartment which is vented to the outside of the building and should incorporate a remote sensing fire valve with the sensor above the oil lifter and the body located external to the building. An additional fire valve should also be fitted after the oil lifter with the sensor at the burner. Fail (NCR) if not fitted to specifications and Potential Safety Risk.

Burner Isolation valve: An additional isolation valve should be fitted near to or within the appliance casing to allow fuel to be turned off when replacing oil related burner components. Fail (NCR) if not fitted or not operating.

Flexible Oil lines: 1 or 2 fitted to a Pressure Jet burner so it can be removed for service or repair without disconnecting the main oil lines. Oil supply pipe(s) connections to flexi oil lines should (be inside the boiler casing where applicable and) be positioned above an oil drip tray. Fail (NCR) if solid oil lines used or flexi protrudes from casing where applicable or if the connections to the flexi lines are inaccessible to allow replacement.

Any Domestic oil appliance or Domestic oil tank of 3500 litres or less installed prior to 1st April 2002 was not governed by Building Regulations; therefore, the owner cannot be forced to bring their Installations in line with the current regulations until they either move or replace the Oil tank or Oil appliance; it is strongly recommended that they check with their Insurance companies as there may be a clause to void any insurance claim if the system is not compliant with Current Regulations. This factsheet is designed only to give a basic guide to the legality of installations both before and after the introduction of Building Regulations Approved Document J, it should only be used as a guide, for full details please see the Building Regulations Approved Document J, BS5410 parts 1, 2, 3 and OFTEC Technical Book 3.