Water Supply (Water Fittings) Regulations 1999

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Animal Drinking Troughs and Bowls

1. The inlet to an animal or poultry drinking trough should be provided with a float operated valve or other no less effective inlet device. The inlet device should be a AA or AB airgap installed to prevent backflow from a fluid category 5 risk and prevent any contamination of the supply pipe. The inlet device and backflow arrangement should be protected from damage. The general arrangements of the trough will be accepted as being satisfied if the animal watering trough complies with BS3445: Fixed agricultural water troughs & water fittings (see fig 1).

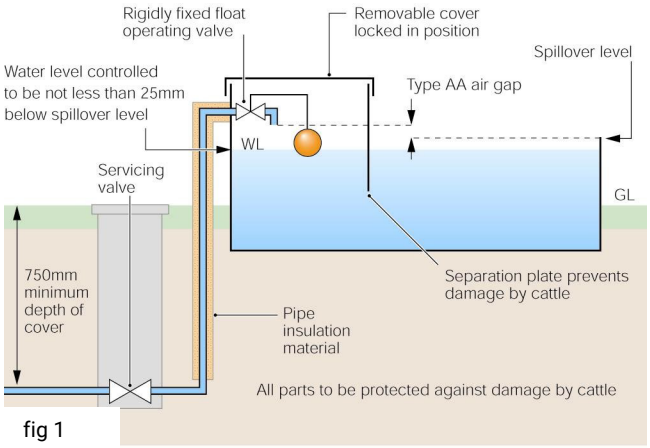

fig 1

2. Where there are animal drinking troughs which are supplied with water from a single trough the spillover levels of the supplied drinking troughs should be at a higher level than the initial drinking trough in which the water inlet device is located. This is illustrated in fig 2 where troughs B and C are arranged at such a level that any overflow takes place at A, where trough A is arranged as in fig 1.

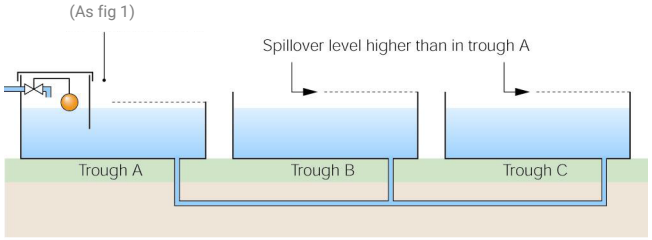

fig 2

3. Field trough supplies shall be provided with an additional secondary means of backflow protection in the form of a double check valve housed in a chamber large enough to permit replacement and sited as near to NWL's main as is reasonably possible.

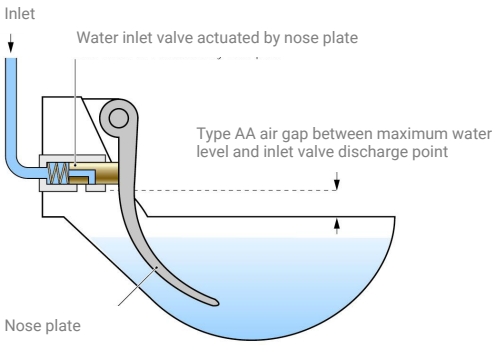

fig 3

4. Where Animal drinking bowls are supplied with water the source of the supply will depend on the type of bowl being installed. Examples of the types of animal drinking bowls available are shown here.
Fig 3 has an air gap incorporated within the inlet device and this type may be supplied with water directly from a supply pipe providing that the air gap is equivalent to a type AA air gap. Fig 4 shows a type of bowl where the inlet valve could become submerged and this type should only be supplied from a dedicated cistern.

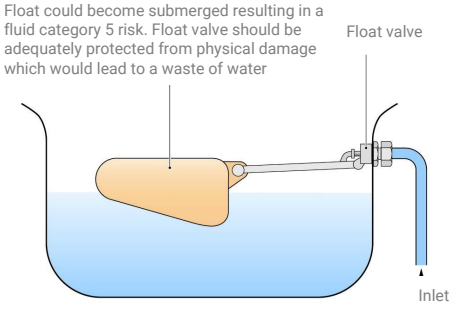

fig 4

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Installing a trough supply

This sheet explains what you need to do to pass a water regulations inspection required for a 25mm/32mm agricultural trough supply

1. To prevent damage and loss of water, the trough needs to be installed on a levelled hard standing/ concrete base.

2. When installing the trough, please ensure it has a rigidly fixed float operating valve and also a removable lockable cover to protect the internal pipework.

3. The minimum air gap (Type AA) between the inlet point and the overflow level needs to be 20mm or twice the diameter of the inlet pipe (or whichever is greater.

4. The depth of the service pipe should be between 750mm minimum and 1350mm maximum.

5. Include isolation valve requirements if needed.

6. The pipe material needs to be either MDPE or barrier pipe. This will be highlighted on the customer sketch attached to the quote.

7. The service pipe must be insulated and ducted from where it raises from 750mm to the ground level. The duct should be a continuous non perforated duct at least 4” in diameter.

8. From where the pipe comes out from the ground level to the trough inlet, the pipe needs to be insulated in a 19mm thick closed-cell insulation material.

9. All above ground pipework needs to be securely fixed in a housing to avoid any damage from livestock.

10. Where the plot boundary meets the highway - as illustrated in the quote sketch - a suitable mechanical cap end should be fitted to prevent ingress and contamination of the service pipe. This cap end must be fitted when you install the pipe.

11. All fittings utilised for installing the service pipe and onward plumbing system must comply with Section 4 of the Water Supply (Water Fittings) Regulations 1999.