



### **Advice and guidance on using Wood Pellets**

Wood Pellets Systems are simple and reliable when set up correctly. However these systems are still new within the UK, and many boiler manufacturers, installers, suppliers and users of pellets are developing their experience and expertise.

We thought it would be useful if we pulled together a list of some of the things we have witnessed that have caused problems or difficulties when getting used to handling this material. This is not meant to be a comprehensive guide, but hopefully might give you a few hints that will help you install and run your systems properly.

### **2. Installation and running of Silos and Bunkers**

These can often cause more problems than the boiler! We do recommend you seek a specialist for installing your silo or bunker. Poor design can cause a number of difficulties. The silo must be absolutely watertight, as any moisture will destroy the pellets. Please ensure the silo has enough inspection panels, so you can see how much is in there easily at all levels. It should also have an access hatch, high enough to be able to access the silo even when full.

The pipework to load the silo should be 110mm wide, with the minimum of curves possible. You must avoid sharp bends which will shatter the pellets when blown in – a gentle curve of approx 1m radius would normally be acceptable. The pipework for the delivery vehicle to connect to should ideally be 1m from the ground, and usually vertical to prevent moisture ingress.

The vehicle needs to get as close as possible to the connector – the maximum distance would be 10m unless by special arrangement. The longer the distance, the more likely the pellets will get damaged. You must be very clear when ordering to let your supplier know the pipework connector type. The pipework and silo must be adequately earthed to prevent static electricity build up.

There should be some form of soft sheeting, usually a foam or rubber mat, within the silo to prevent the pellets hitting a hard surface on loading. The silo must have some form of venting, to relieve air pressure from unloading. This can either be in the form of a filter, cyclone or a dust sock. We can provide a dust sock with prior agreement. The diameter of the vent pipe should ideally be greater than the diameter of the intake pipe to prevent the silo becoming pressurized.

It is often a good idea, when first commissioning a silo, to only part-fill it initially. This allows you to test the system first before fully loading it.

It is important that you can access all moving parts of the system to allow for servicing or maintenance, such as augers etc. Ideally you should have some way to shut the pellets off in the store, so you can maintain the augers without having to empty the fuel out first. It is a good idea to run the whole store completely empty once a year, and to clean out any dust deposits that might have built up. Obviously not a good idea to do this in February! If you only use your wood pellet system for heating in the winter, in an ideal world you should try to empty the silo when shutting down, in order to avoid pellets sitting in there for months.