



Wood Energy Ltd

Engineering, Installation and Servicing of Wood Fuelled Heating Systems

Rendlesham Primary School, Suffolk 120kW Binder wood chip boiler

Background to the site

Rendlesham Primary School is a new build primary school in the village of Rendlesham, north of Ipswich. Suffolk County Council have installed wood heating systems at 6 primary schools in the period 2005-06.

The wood chip boiler system

The school is heated with a 120kW Binder wood chip boiler installed and commissioned by Wood Energy Ltd. The equipment is installed in a purpose-built boiler and fuel store, giving an active storage volume of about 25m³. It has an integral 2000l buffer tank to control low load conditions in summer and also provide a 150kW peak load in winter mornings. The wood chip fuel supply chain has been established using round wood from local Forestry Commission woodland, and organised by Eastern Woodfuel, located less than 1 mile away at nearby Bentwater Parks. They are members of Anglia Woodfuels who have supported the development with training and technical advice. The fuel is blown via a specialist blowing vehicle.

The system has a small solar water heating system feeding into a large hot water tank. It has no back-up fossil fuel boiler, though the County Council has a contract with a Facilities Management Co. to provide emergency oil heating within two hours if necessary.



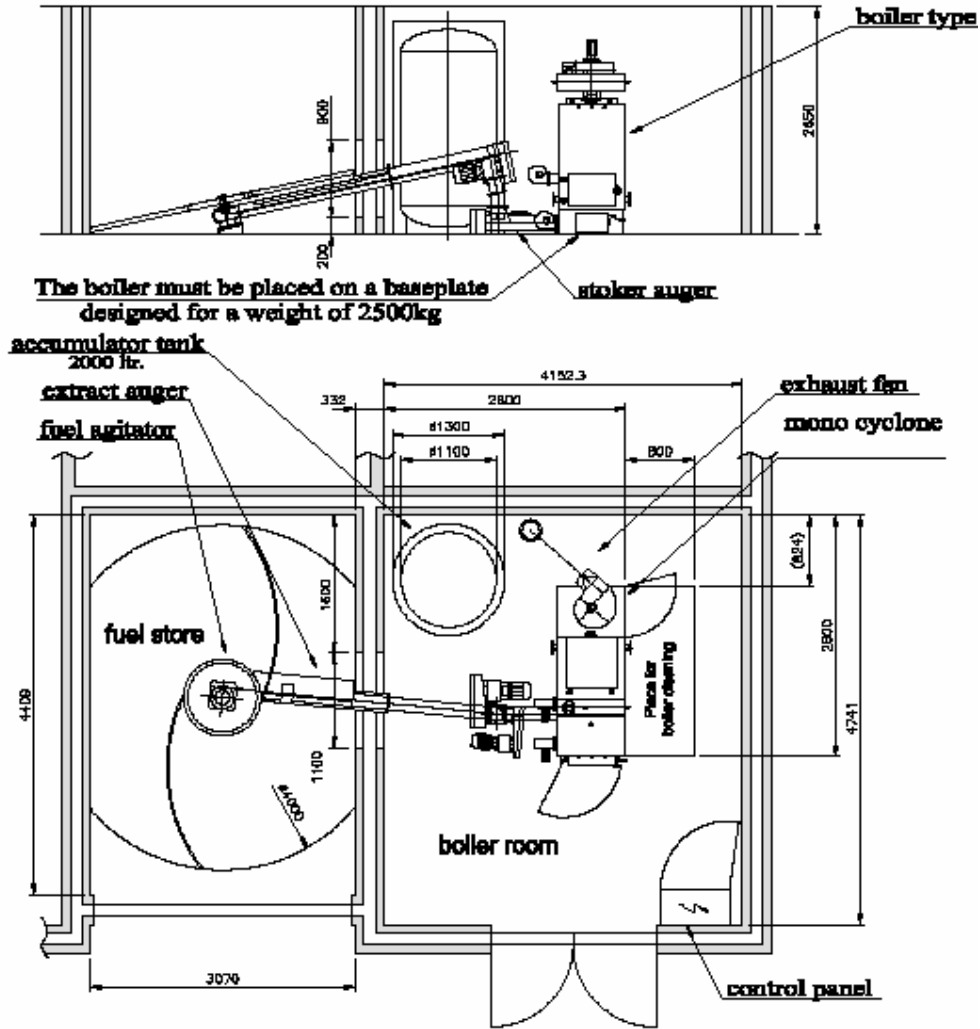
Contact Details

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Technical Specification

120kW underfed hearth Binder Boiler
2000l buffer tank
Cyclone exhaust cleaner
Chip – blown in via specialist chip blowing vehicle
Expected fuel usage – 80-100 tonnes per year
Expected CO₂ savings (compared with oil) – 75-90 tonnes/year

Boiler System Plan and Section



View of the 3m diameter fuel store



Ash Pan being emptied – bi-monthly (winter)