

Windlestone School Co. Durham



Binder boiler for new-build school project is part of the Council's commitment to using carbon neutral, cost-effective heating solutions.

Windlestone School is a new-build residential school in Chilton, Co. Durham.

The school was completed in 2006 and was a relocation project from a 19th Century hall to a purpose-built facility with state-of-the-art educational and en suite facilities to accommodate youngsters.

Durham County Council decided to use a 230kW Binder pellet boiler as part of their long-term commitment to using carbon neutral, cost-effective heating solutions across the County.

Wood Energy Ltd designed and installed a 230kW Binder pellet boiler with a purpose-built block-work room to act as the pellet store. An auger system runs the length of the pellet store to feed wood pellets into the boiler.

The Binder boiler has a fully automatic heat-exchanger cleaning system, exhaust gas recirculation to allow the combustion temperature to be controlled to avoid

clinkering and an exhaust gas cyclone to remove fly ash. The system includes a 4000 litre accumulator tank which is designed to reduce boiler cycling under low load conditions.

Name of project	Windlestone School
Location	Co. Durham
Boiler Type	Binder RRK/PRF 130-250
Maximum rated output	230 kW
Wood fuel storage volume	28m ³
Commissioned	August 2006

