

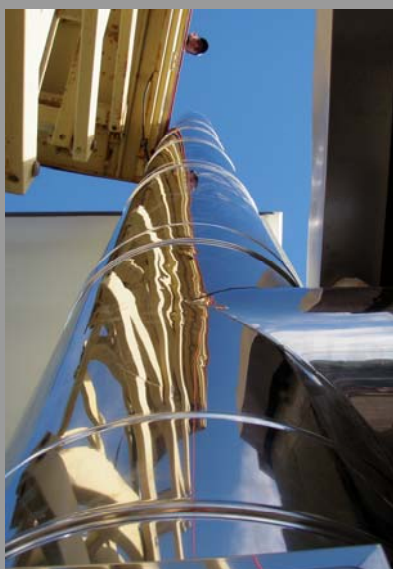
Westland High School 500kW, Hokitika

Westland High School is a medium-sized secondary school in Hokitika on the West Coast of the South Island in New Zealand. The school provides for children in years 7 - 13, as well as the wider community, through a comprehensive programme of adult and community education courses run at weekends and evenings.



Living Energy installed a single high-efficiency 500kW Binder woodfuel boiler in place of the two existing coal boilers, which had been rated at around 500kW each. The project involved the complete removal of the old boilers, the fuel recovery mechanism and a portion of the pipework in the boiler room. The boiler room was completely refurbished and the electrics replaced throughout. A 15,000 litre accumulator tank was also installed as part of the project, in order to smooth the load on the boiler and provide for more efficient operation - this was housed in a new purpose-built structure adjacent to the existing boiler house.

The fully-automated Binder boiler has an advanced step-grate system which allows it to burn a wide range of wood fuels, from pellets through to wet woodchip. This gives the school excellent fuel flexibility and ensures constant availability. Fully automated fuel feed, automatic de-ashing and self-cleaning boiler tubes have reduced the amount of work required by the caretaker to a fraction of that which was necessary with the coal boilers. Living Energy have entered into a long-term heat supply agreement with Westland High, whereby we manage the local woodchip supply and boiler servicing for a set price per kWh of heat supplied - meaning that the school gets price certainty and does not need to become an expert in fuel sourcing or boiler maintenance.



Installation Summary	
Client	Westland High School
Location	Hokitika, West Coast
Boiler Type	Binder RRR/SRF 400-600
Rated Output	500kW
Wood Fuel Type	Wood fuels ≤55% MC
Date of Commissioning	April 2009

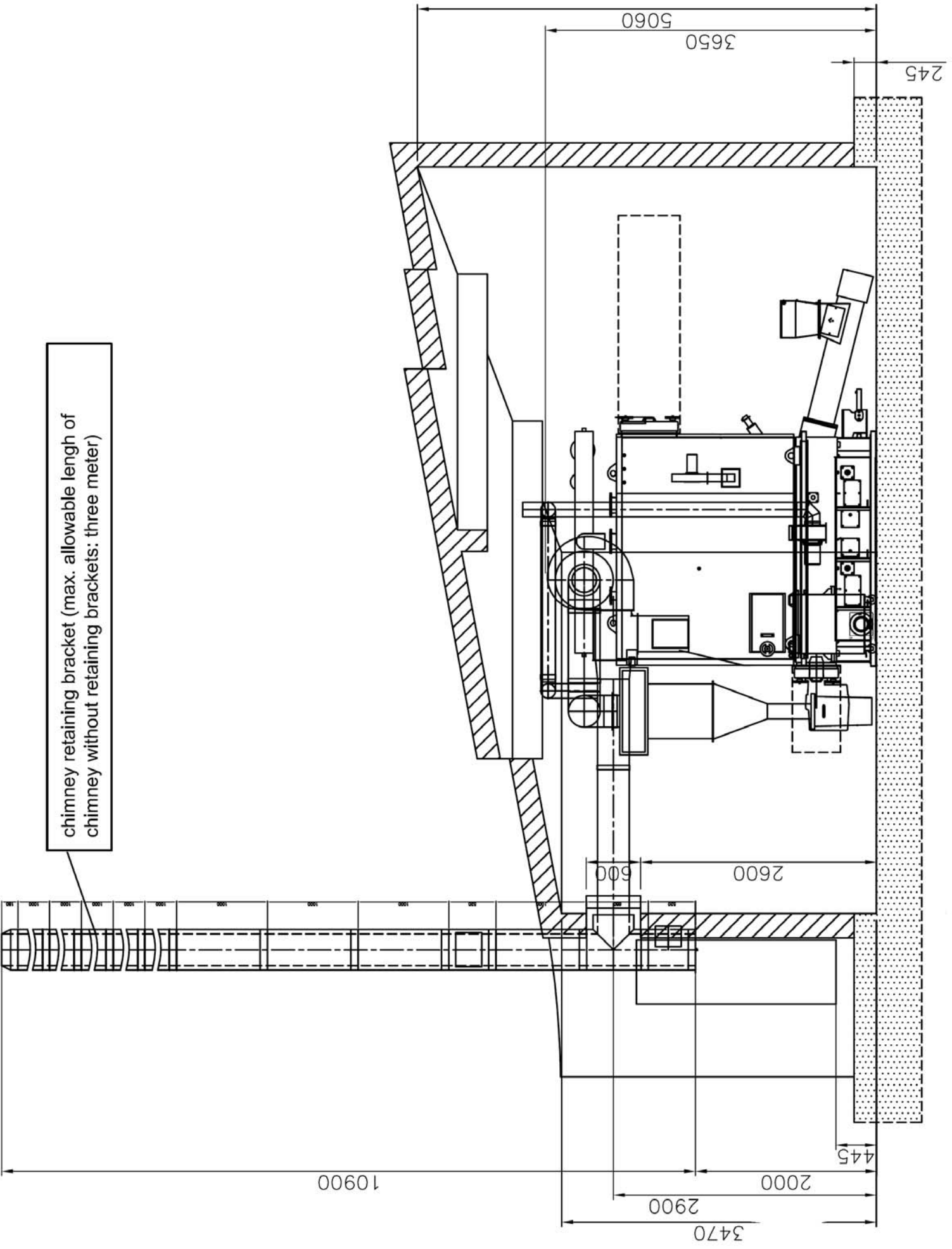


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Design, Installation and Servicing
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chimney retaining bracket (max. allowable length of chimney without retaining brackets: three meter)