



## Report on Boiler Flue systems

<b>Site</b>	<b>Client</b>	<b>Date</b>	<b>24/06/20</b>
Regents Park Estate Mardale (was Rydal) St Beads Hampstead Rd NW1 2PS	Bates Group Walker House School Road Rayne Essex, CM77 6ST		

Mardale Flue Velocity Test

Boilers - 3 x Broag 210-160

Combustion analysis 3 boilers all Full Load

Measured at terminal outlet

Log No	Log Time	CO (ppm)	CO2 %	NO (ppm)	O2 (%)	T1 (°C)	T2 (°C)	Tamb (°C)	Pressure (mbar)	CO/CO2 Ratio
106	13:01:33	52	9.9	17	3.4	59.9	-	37.3		0.0005

Calculated based on combustion analysis and boiler Rating

Mardale (Rydal) – 3 @ 193kW gross input boilers, and therefore 579kW total

Mardale (Rydal) – 588kW gross = 3.3m/sec at 300mm dia including Mesh

These calculations are to the original design

Volume flow (212)	809.1 m <sup>3</sup> /h	Air type (212) Supply air
Flow velocity (212)	3.40 m/s	
Air temperature (308)	53.5 °C	

Flue outlet diameter 290mm