

Report on Boiler Flue systems

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

Lindale Flue Velocity Test

Boilers - 3 x Broag 210-200

Combustion analysis 3 boiler 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
198	13:55:33	31	9.5	9	4.1	58.9	-	36		0.0003

Calculated based on combustion analysis and boiler Rating

Lindale (Newlands) – 3 @ 233kW gross input boilers, and therefore 699kW total

Lindale (Newlands) – 708kW gross = 3.9m/sec at 300mm including Mesh

These calculations are to the original design

Measured results using Testo 501i With Pitot Tube

Inaccuracy possibly due to Steam Vapor restricting pitot ports and maximum high fire operating time due to limited load (Boilers may not have reached maximum output before shutting down due to over temperature)

Volume flow (212) 759.3 m³/h
Flow velocity (212) 3.19 m/s
Air temperature (308) 54.5 °C

Air type (212) Supply air

Flue outlet diameter 300mm