

CHP Sizing against site demand from SAP

	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec
Main heating Fuel Average Per Apartment	606.26	270.72	110.66	25.69	3.16	0.00	0.00	0.00	0.00	29.64	304.32	626.42
Main heating Fuel Average for 121 Apts	73358	32757	13390	3108	383	0.00	0.00	0.00	0.00	3587	36822	75797
Water Fuel Requirement for 121 Apts	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25	22778.25
Allowance for Business DHW Demand	317.12	317.12	317.12	317.12	317.12	317.12	317.12	317.12	317.12	317.12	317.12	317.12
Building Demand (kWh)	96453	55853	36485	26204	23478	23095	23095	23095	23095	26682	59918	98892
CHP Thermal Output sized at 60% demand	25807.3	25817.3	25817.3	25817.3	25817.3	25817.3	25817.3	25817.3	25817.3	25817.3	25817.3	25817.3
CHP Thermal Output sized at 50% demand	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4	21514.4

Total	
1976.08	kWh/yr
239201.3	kWh/yr
273339	kWh/yr
3805.44	kWh/yr
516345.8	kWh/yr
309807.5	kWh/yr
258172.9	kWh/yr

CHP @ 4200kWh/yr @ 60% demand	74	kW	Approx.	CHP Selected sized based on 60% of demand
CHP @ 4200kWh/yr @ 50% demand	61	kW	Approx.	CHP Selected sized based on 50% of demand - Manufacturers data is 30kWe - 60kWth

unit at 60% would be oversized for 5 months of operation.