

Project	London Office	Project no.	33
Engineer	KAL	Checked by	
File	C:\Users\khalid\Documents\Hevacomp Projects\Crawford London Office\General\General\Hevacomp DDB\	Date checked	

<i>Rooms included</i>	Room 04 selected
<i>Heating system</i>	Heating only (wet system)
<i>Recirculation</i>	-
<i>System resistance</i>	-
<i>Fan efficiency</i>	-
<i>Duct gains</i>	-
<i>Heating controls</i>	Intermittently heated, fixed time start, One stat/room unshaded
<i>Supply air temp.</i>	-
<i>Air changes</i>	-
<i>Plant capacity</i>	Plant ratio 1.2, boiler efficiency 70 %, transport factor 40
<i>Heating fuel</i>	Gas, cost for heating 6 p/kWhr
<i>Electricity</i>	Cost for pumps and fans 27 p/kWhr, lighting 27 p/kWhr
<i>Heat losses</i>	Resultant temperatures, Complex heat loss model
<i>HWS demand</i>	4 l/person/day at 40 °C

<i>Season</i>	<i>Plant operation and load factors (%)</i>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Win	Win	Win	Win	-	-	-	-	-	Win	Win	Win	
ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
100	100	100	100	90	90	75	90	90	100	100	100	
100	100	100	100	90	90	90	90	90	100	100	100	
100	100	100	100	100	100	100	100	100	100	100	100	

	<i>Annual building energy (GJ)</i>	<i>Annual plant energy (GJ)</i>	<i>Annual cost (pounds)</i>
Heating	411.62	588.02	9,799
HWS	13.1	18.71	312
Pumps		18.78	1,409
Fans		0	0
Lighting	185.57	185.57	13,918
		Total cost	25,437

	<i>Energy (GJ)</i>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lighting	15.4644	15.4644	15.4644	15.4644	13.9179	13.9179	11.5983	13.9179	13.9179	15.4644	15.4644	15.4644
Fans	0	0	0	0	0	0	0	0	0	0	0	0
Pumps	2.6833	2.6833	2.6833	2.6833	0	0	0	0	0	2.6833	2.6833	2.6833
HWS	1.6269	1.6269	1.6269	1.6269	1.4642	1.4642	1.4642	1.4642	1.4642	1.6269	1.6269	1.6269
Heating	111.55551	102.6398	82.3561	52.1119	0	0	0	0	0	52.6236	82.79561	103.9413