

Cert.#:  
 28 Currie Street, Unit 5B, Barrie, ON L4M 5N4 Phone: 705-812-0668

**Project Information**

For: Green Giant Design Build  
 Site: 20888 Springfield RD, Melbourne, ON

**Design Information**

	Htg	Clg	Infiltration	
Outside db (°F)	0	86	Method	F280-12
Inside db (°F)	72	75	Exposure category	Light local shielding
Design TD (°F)	72	11	Construction category	Energy Tight (ACH=1.5)
Daily range	-	M	Number of stories	2.0
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	31	47		

**HEATING EQUIPMENT**

Make	Generic
Trade	Sample
Model	AFUE94-25G
AHRI ref	0
Efficiency	94 AFUE
Heating input	30000 Btuh
Heating output	25000 Btuh
Temperature rise	0 °F
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

**COOLING EQUIPMENT**

Make	Generic
Trade	Generic 12 SEER
Cond	SEER12-012A
Coil	C24
AHRI ref	0
Efficiency	11.0 EER, 12 SEER
Sensible cooling	8400 Btuh
Latent cooling	3600 Btuh
Total cooling	12000 Btuh
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Utility	167	625	536	0	29
Kitchen	178	1287	427	0	23
Dining	150	434	357	0	20
Bathroom	81	115	405	0	22
Lounge	189	653	1201	0	66
Living	291	529	1192	0	65
Foyer	194	348	357	0	20
Conservatory	272	2128	2402	0	131
Bathroom.	209	628	497	0	27
Bedroom3	240	938	700	0	38
Bedroom2	189	853	678	0	37
Master Bed	240	712	443	0	24
Hall	304	789	560	0	31
Clst3	16	13	200	0	11
Clst	11	101	206	0	11
Clst2	16	98	204	0	11

Clst4		16	13	200	0	11
Clst5		6	5	197	0	11
Entire House	d	2769	10270	10763	0	588
Other equip loads			2770	111		
Equip. @ 1.00 RSM				10874		
Latent cooling				3262		
TOTALS		2769	13040	14136	0	588

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## Project Information

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## Design Conditions

### Location:

London, ON, CA  
 Elevation: 912 ft  
 Latitude: 43°N

### Outdoor:

Dry bulb (°F)  
 Daily range (°F)  
 Wet bulb (°F)  
 Wind speed (mph)

### Heating

0  
 -  
 -  
 11.8

### Cooling

86  
 18 ( M )  
 75  
 6.8

### Indoor:

Indoor temperature (°F)  
 Design TD (°F)  
 Relative humidity (%)  
 Moisture difference (gr/lb)

### Heating

72  
 72  
 30  
 30.6

### Cooling

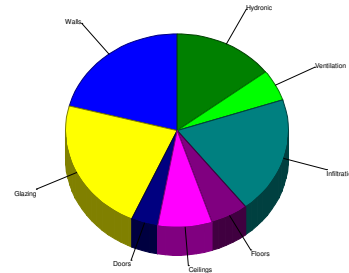
75  
 11  
 50  
 47.0

### Infiltration:

Method: F280-12  
 Exposure category: Light local shielding  
 Construction category: Energy Tight (ACH=1.5)  
 Number of stories: 2.0

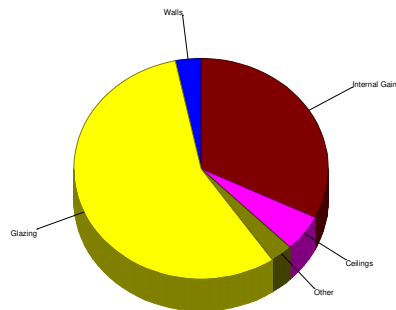
## Heating

Component	Btuh/ft²	Btuh	% of load
Walls	1.1	2919	20.9
Glazing	8.0	3128	22.4
Doors	6.4	540	3.9
Ceilings	0.7	1104	7.9
Floors	0.3	762	5.5
Infiltration	5.7	2732	19.6
Ducts		0	0
Hydronic		2041	14.6
Humidification		0	0
Ventilation		729	5.2
Adjustments		-915	
<b>Total</b>		<b>13040</b>	<b>100.0</b>



## Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.1	355	3.3
Glazing	15.6	6116	56.2
Doors	0.9	74	0.7
Ceilings	0.4	580	5.3
Floors	0.0	12	0.1
Infiltration	0.2	116	1.1
Ducts		0	0
Ventilation		111	1.0
Internal gains		3511	32.3
Blower		0	0
Adjustments		0	
<b>Total</b>		<b>10874</b>	<b>100.0</b>



Latent Cooling Load = 3262 Btuh  
 Overall U-value = 0.016 Btuh/ft²-°F

Data entries checked.

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## Project Information

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Notes:

## Design Information

Weather: London, ON, CA

### Winter Design Conditions

Outside db	0 °F
Inside db	72 °F
Design TD	72 °F

### Summer Design Conditions

Outside db	86 °F
Inside db	75 °F
Design TD	11 °F
Daily range	M
Relative humidity	50 %
Moisture difference	47 gr/lb

### Heating Summary

Structure	10270 Btuh
Ducts	0 Btuh
Central vent (117 cfm)	729 Btuh
Humidification	0 Btuh
Piping	2041 Btuh
Equipment load	13040 Btuh

### Sensible Cooling Equipment Load Sizing

Structure	10763 Btuh
Ducts	0 Btuh
Central vent (117 cfm)	111 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	10874 Btuh

### Infiltration

Method	F280-12	
Exposure category	Light local shielding	
Const. categ.	Energy Tight (ACH=1.5)	
Number of stories	2.0	
	<b>Heating</b>	<b>Cooling</b>
Area (ft²)	2769	2769
Volume (ft³)	26121	26121
Air changes/hour	0.08	0.02
Equiv. AVF (cfm)	35	10

### Latent Cooling Equipment Load Sizing

Structure	1668 Btuh
Ducts	0 Btuh
Central vent (117 cfm)	1594 Btuh
Equipment latent load	3262 Btuh
Equipment total load	14136 Btuh
Req. total capacity at 0.70 SHR	1.3 ton

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Static pressure	0 in H2O
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