

System Checksums

By MFIA Inc.

1 bedroom - PTHP-1

System 2 - 2007/2010 - Packaged Terminal Heat Pump

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 17			Mo/Hr: 7 / 17		Mo/Hr: Heating Design		Mo/Hr: Heating Design					
Outside Air:		OADB/WB/HR: 84 / 65 / 62			OADB: 84		OADB: 23		OADB: 23					
Space Sens. + Lat.	Plenum Sens. + Lat.	Net Total	Percent Of Total		Space Sensible	Percent Of Total		Space Peak	Coil Peak	Percent		SADB	Cooling	Heating
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)		Space Sens	Tot Sens	Of Total	(%)	Ra Plenum		
Envelope Loads					Envelope Loads			Envelope Loads				Return		
Skylite Solar	0	0	0	0	0	0	0	0	0	0.00	0.00	Fn MtrTD	0.0	0.0
Skylite Cond	0	0	0	0	0	0	0	0	0	0.00	0.00	Fn BldTD	0.0	0.0
Roof Cond	0	0	0	0	0	0	0	0	0	0.00	0.00	Fn Frict	0.0	0.0
Glass Solar	4,092	0	4,092	41	4,092	44	0	0	0	0.00	0.00	AIRFLOWS		
Glass/Door Cond	108	0	108	1	108	1	0	-1,036	-1,036	26.38	26.38			
Wall Cond	121	50	171	2	121	1	0	-373	-533	13.58	13.58			
Partition/Door	0	0	0	0	0	0	0	0	0	0.00	0.00	Diffuser	416	416
Floor	0	0	0	0	0	0	0	0	0	0.00	0.00	Terminal	416	416
Adjacent Floor	0	0	0	0	0	0	0	0	0	0	0	Main Fan	416	416
Infiltration	0	0	0	0	0	0	0	0	0	0.00	0.00	Sec Fan	0	0
Sub Total ==>	4,321	50	4,371	44	4,321	47	0	-1,409	-1,569	39.96	39.96	Nom Vent	45	45
Internal Loads					Internal Loads			Internal Loads				AHU Vent	45	45
Lights	1,098	274	1,372	14	1,098	12	0	0	0	0.00	0.00	Infil	0	0
People	0	0	0	0	0	0	0	0	0	0.00	0.00	MinStop/Rh	0	0
Misc	3,500	0	3,500	35	3,500	38	0	0	0	0.00	0.00	Return	416	416
Sub Total ==>	4,598	274	4,872	49	4,598	50	0	0	0	0.00	0.00	Exhaust	45	45
Ceiling Load					Ceiling Load			Ceiling Load				Rm Exh	0	0
Ventilation Load	0	0	781	8	0	0	0	-160	0	0.00	0.00	Auxiliary	0	0
Adj Air Trans Heat	0	0	0	0	0	0	0	0	-2,358	60.04	60.04	Leakage Dwn	0	0
Dehumid. Ov Sizing			0	0			0	0	0	0	0	Leakage Ups	0	0
Ov/Undr Sizing	0	0	0	0	0	0	0	0	0	0.00	0.00	ENGINEERING CKS		
Exhaust Heat		0	0	0			0	0	0	0.00	0.00			
Sup. Fan Heat		0	0	0			0	0	0	0.00	0.00	% OA	10.8	10.8
Ret. Fan Heat		0	0	0			0	0	0	0.00	0.00	cfm/ft²	0.62	0.62
Duct Heat Pkup		0	0	0			0	0	0	0.00	0.00	cfm/ton	432.64	
Underflr Sup Ht Pkup		0	0	0			0	0	0	0.00	0.00	ft²/ton	697.43	
Supply Air Leakage		0	0	0			0	0	0	0.00	0.00	Btu/hr-ft²	17.21	-7.33
Grand Total ==>	9,266	-23	10,024	100.00	9,266	100.00	0	-1,569	-3,927	100.00	100.00	No. People	0	

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR				Gross Total	Glass		Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh	MBh	cfm	°F °F	gr/lb	°F °F	gr/lb			ft² (%)		MBh	cfm	°F	°F	
Main Clg	1.0	11.5	9.7	416	76.0 60.3	53.2	55.0 50.4	46.9		Floor	670		Main Htg	-4.9	416 64.9	73.4	
Aux Clg	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Part	0		Aux Htg	0.0	0 0.0	0.0	
Opt Vent	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Int Door	0		Preheat	0.0	0 0.0	0.0	
										ExFlr	0						
Total	1.0	11.5								Roof	0	0 0	Humidif	0.0	0 0.0	0.0	
										Wall	220	75 34	Opt Vent	0.0	0 0.0	0.0	
										Ext Door	0	0 0	Total	-4.9			

System Checksums

By MFIA Inc.

2bedroom - PTHP-2

System 2 - 2007/2010 - Packaged Terminal Heat Pump

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time: Mo/Hr: 7 / 16					Mo/Hr: 7 / 17			Mo/Hr: Heating Design						
Outside Air: OADB/WB/HR: 86 / 66 / 65					OADB: 84			OADB: 23						
Space Sens. + Lat.	Plenum Sens. + Lat.	Net Total	Percent Of Total		Space Sensible	Percent Of Total		Space Peak	Coil Peak	Percent			Cooling	Heating
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)		Space Sens	Tot Sens	Of Total				
Envelope Loads					Envelope Loads			Envelope Loads						
Skylite Solar	0	0	0	0	0	0	0	0	0	0.00	0	SADB	55.0	73.9
Skylite Cond	0	0	0	0	0	0	0	0	0	0.00	0	Ra Plenum	76.7	69.1
Roof Cond	0	0	0	0	0	0	0	0	0	0.00	0	Return	75.0	70.0
Glass Solar	5,697	0	5,697	45	5,697	51	0	0	0	0.00	0	Ret/OA	76.9	61.6
Glass/Door Cond	89	0	89	1	89	1	0	-1,450	-1,450	20.96	0	Fn MtrTD	0.0	0.0
Wall Cond	154	63	217	2	154	1	0	-528	-753	10.89	0	Fn BldTD	0.0	0.0
Partition/Door	0	0	0	0	0	0	0	0	0	0.00	0	Fn Frict	0.0	0.0
Floor	0	0	0	0	0	0	0	0	0	0.00	0			
Adjacent Floor	0	0	0	0	0	0	0	0	0	0	0			
Infiltration	0	0	0	0	0	0	0	0	0	0.00	0			
Sub Total ==>	5,940	63	6,003	47	5,940	53	0	-1,978	-2,203	31.85	0			
Internal Loads					Internal Loads			Internal Loads						
Lights	1,343	336	1,679	13	1,343	12	0	0	0	0.00	0			
People	0	0	0	0	0	0	0	0	0	0.00	0			
Misc	3,500	0	3,500	28	3,500	31	0	0	0	0.00	0			
Sub Total ==>	4,843	336	5,179	41	4,843	43	0	0	0	0.00	0			
Ceiling Load					Ceiling Load			Ceiling Load						
Ventilation Load	0	0	1,482	12	0	0	0	-225	0	0.00	0			
Adj Air Trans Heat	0	0	0	0	0	0	0	0	-4,715	68.15	0			
Dehumid. Ov Sizing			0	0			0	0	0	0.00	0			
Ov/Undr Sizing	0	0	0	0	0	0	0	0	0	0.00	0			
Exhaust Heat		0	0	0			0	0	0	0.00	0			
Sup. Fan Heat		0	0	0			0	0	0	0.00	0			
Ret. Fan Heat		0	0	0			0	0	0	0.00	0			
Duct Heat Pkup		0	0	0			0	0	0	0.00	0			
Underflr Sup Ht Pkup		0	0	0			0	0	0	0.00	0			
Supply Air Leakage		0	0	0			0	0	0	0.00	0			
Grand Total ==>	11,227	-45	12,664	100.00	11,232	100.00	0	-2,203	-6,919	100.00	0			

AIRFLOWS		
	Cooling	Heating
Diffuser	504	504
Terminal	504	504
Main Fan	504	504
Sec Fan	0	0
Nom Vent	90	90
AHU Vent	90	90
Infil	0	0
MinStop/Rh	0	0
Return	504	504
Exhaust	90	90
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	17.9	17.9
cfm/ft²	0.61	0.61
cfm/ton	415.12	
ft²/ton	675.68	
Btu/hr-ft²	17.76	-10.55
No. People	0	

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR				Gross Total	Glass		Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh	MBh	cfm	°F °F	°F °F	gr/lb				ft²	(%)	MBh	cfm	°F	°F	
Main Clg	1.2	14.6	12.1	504	76.7 60.8	54.4	55.0 50.5	47.5		Floor	820		Main Htg	-8.7	504	61.6	73.9
Aux Clg	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Part	0		Aux Htg	0.0	0	0.0	0.0
Opt Vent	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Int Door	0		Preheat	0.0	0	0.0	0.0
										ExFlr	0						
Total	1.2	14.6								Roof	0	0	Humidif	0.0	0	0.0	0.0
										Wall	310	105	Opt Vent	0.0	0	0.0	0.0
										Ext Door	0	0	Total	-8.7			

System Checksums

By MFIA Inc.

3rd Floor Lobby - IHP/OHP4

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 9			Mo/Hr: Sum of		Mo/Hr: Heating Design				Cooling		Heating	
Outside Air:		OADB/WB/HR: 71 / 56 / 40			OADB: Peaks		OADB: 23				SADB	61.4	71.9	
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total	Space Peak	Coil Peak	Percent					
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Space Sens	Tot Sens	Of Total					
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Btu/h	Btu/h	(%)					
Envelope Loads					Envelope Loads					Envelope Loads				
Skylite Solar	0	0	0	0	0	0	0	0	0.00					
Skylite Cond	0	0	0	0	0	0	0	0	0.00					
Roof Cond	0	0	0	0	0	0	0	0	0.00					
Glass Solar	20,781	0	20,781	82	20,781	85	0	0	0.00					
Glass/Door Cond	-305	0	-305	-1	-305	-1	-3,330	-3,330	55.96					
Wall Cond	0	14	14	0	0	0	0	-269	4.52					
Partition/Door	0		0	0	0	0	0	0	0.00					
Floor	0		0	0	0	0	0	0	0.00					
Adjacent Floor	0	0	0	0	0	0	0	0	0					
Infiltration	0		0	0	0	0	0	0	0.00					
Sub Total ==>	20,476	14	20,491	80	20,476	84	-3,330	-3,599	60.49					
Internal Loads					Internal Loads					Internal Loads				
Lights	2,048	512	2,560	10	2,048	8	0	0	0.00					
People	3,375	0	3,375	13	1,875	8	0	0	0.00					
Misc	0	0	0	0	0	0	0	0	0.00					
Sub Total ==>	5,423	512	5,935	23	3,923	16	0	0	0.00					
Ceiling Load	61	-61	0	0	61	0	-31	0	0.00					
Ventilation Load	0	0	-954	-4	0	0	0	-2,358	39.63					
Adj Air Trans Heat	0		0	0	0	0	0	0	0					
Dehumid. Ov Sizing			0	0			0	0	0.00					
Ov/Undr Sizing	0		0	0	0	0	0	7	-0.11					
Exhaust Heat		-13	-13	0			0	0	0.00					
Sup. Fan Heat			0	0			0	0	0.00					
Ret. Fan Heat		0	0	0			0	0	0.00					
Duct Heat Pkup		0	0	0			0	0	0.00					
Underflr Sup Ht Pkup			0	0			0	0	0.00					
Supply Air Leakage		0	0	0			0	0	0.00					
Grand Total ==>	25,960	452	25,458	100.00	24,460	100.00	-3,361	-5,950	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	1,615	1,615
Terminal	1,615	1,615
Main Fan	1,615	1,615
Sec Fan	0	0
Nom Vent	45	45
AHU Vent	45	45
Infil	0	0
MinStop/Rh	0	0
Return	1,615	1,615
Exhaust	45	45
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	2.8	2.8
cfm/ft²	2.15	2.15
cfm/ton	761.22	
ft²/ton	353.52	
Btu/hr-ft²	33.94	-7.93
No. People	8	

AIRFLOWS			Cooling	Heating
Diffuser	1,615	1,615		
Terminal	1,615	1,615		
Main Fan	1,615	1,615		
Sec Fan	0	0		
Nom Vent	45	45		
AHU Vent	45	45		
Infil	0	0		
MinStop/Rh	0	0		
Return	1,615	1,615		
Exhaust	45	45		
Rm Exh	0	0		
Auxiliary	0	0		
Leakage Dwn	0	0		
Leakage Ups	0	0		

ENGINEERING CKS			Cooling	Heating
% OA	2.8	2.8		
cfm/ft²	2.15	2.15		
cfm/ton	761.22			
ft²/ton	353.52			
Btu/hr-ft²	33.94	-7.93		
No. People	8			

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
Total Capacity	Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR	Gross Total			Glass		Capacity	Coil Airflow	Ent	Lvg				
ton	MBh	cfm	°F °F	gr/lb	°F °F	gr/lb	°F °F	gr/lb	(%)	MBh	cfm	°F	°F				
Main Clg	2.1	25.5	24.7	1,615	75.2	62.5	64.3	61.4	57.3	63.6	Floor	750	-6.0	1,615	68.6	71.9	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	0	0.0	0	0.0	0.0	
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Int Door	0	0.0	0	0.0	0.0	
											ExFlr	0	0.0	0	0.0	0.0	
Total	2.1	25.5									Roof	0	0.0	0	0.0	0.0	
											Wall	365	292	80	0.0	0.0	
											Ext Door	0	0	0	0.0	0.0	
											Total	-6.0					

System Checksums

By MFIA Inc.

4th Floor Lobby - IHP/OHP-5

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK		HEATING COIL PEAK			TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 9			Mo/Hr: Sum of		Mo/Hr: Heating Design			Cooling Heating		
Outside Air:		OADB/WB/HR: 71 / 56 / 40			OADB: Peaks		OADB: 23			SADB		
Space Sens. + Lat.	Plenum Sens. + Lat.	Net Total	Percent Of Total		Space Sensible	Percent Of Total	Space Peak	Coil Peak	Percent	SADB		
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)	Space Sens	Tot Sens	Of Total	Ra Plenum		
							Btu/h	Btu/h	(%)	Return		
										Ret/OA		
										Fn MtrTD		
										Fn BldTD		
										Fn Frict		
Envelope Loads												
Skylite Solar	0	0	0	0	0	0	0	0	0.00			
Skylite Cond	0	0	0	0	0	0	0	0	0.00			
Roof Cond	0	0	0	0	0	0	0	0	0.00			
Glass Solar	20,781	0	20,781	82	20,781	85	0	0	0.00			
Glass/Door Cond	-305	0	-305	-1	-305	-1	-3,330	-3,330	55.96			
Wall Cond	0	14	14	0	0	0	0	-269	4.52			
Partition/Door	0	0	0	0	0	0	0	0	0.00			
Floor	0	0	0	0	0	0	0	0	0.00			
Adjacent Floor	0	0	0	0	0	0	0	0	0			
Infiltration	0	0	0	0	0	0	0	0	0.00			
Sub Total ==>	20,476	14	20,491	80	20,476	84	-3,330	-3,599	60.49			
Internal Loads												
Lights	2,048	512	2,560	10	2,048	8	0	0	0.00			
People	3,375	0	3,375	13	1,875	8	0	0	0.00			
Misc	0	0	0	0	0	0	0	0	0.00			
Sub Total ==>	5,423	512	5,935	23	3,923	16	0	0	0.00			
Ceiling Load												
Ventilation Load	61	-61	0	0	61	0	-31	0	0.00			
Adj Air Trans Heat	0	0	-954	-4	0	0	0	-2,358	39.63			
Dehumid. Ov Sizing	0		0	0	0	0	0	0	0.00			
Ov/Undr Sizing	0		0	0	0	0	0	0	0.00			
Exhaust Heat		-13	-13	0			0	7	-0.11			
Sup. Fan Heat			0	0			0	0	0.00			
Ret. Fan Heat		0	0	0			0	0	0.00			
Duct Heat Pkup		0	0	0			0	0	0.00			
Underflr Sup Ht Pkup		0	0	0			0	0	0.00			
Supply Air Leakage		0	0	0			0	0	0.00			
Grand Total ==>	25,960	452	25,458	100.00	24,460	100.00	-3,361	-5,950	100.00			

AIRFLOWS		
	Cooling	Heating
Diffuser	1,615	1,615
Terminal	1,615	1,615
Main Fan	1,615	1,615
Sec Fan	0	0
Nom Vent	45	45
AHU Vent	45	45
Infil	0	0
MinStop/Rh	0	0
Return	1,615	1,615
Exhaust	45	45
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	2.8	2.8
cfm/ft²	2.15	2.15
cfm/ton	761.22	
ft²/ton	353.52	
Btu/hr-ft²	33.94	-7.93
No. People	8	

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR				Gross Total	Glass		Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh	MBh	cfm	°F °F	gr/lb	°F °F	gr/lb			ft²	(%)	MBh	cfm	°F	°F	
Main Clg	2.1	25.5	24.7	1,615	75.2 62.5	64.3	61.4 57.3	63.6		Floor	750		Main Htg	-6.0	1,615	68.6	71.9
Aux Clg	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Part	0		Aux Htg	0.0	0	0.0	0.0
Opt Vent	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Int Door	0		Preheat	0.0	0	0.0	0.0
										ExFlr	0						
										Roof	0	0	Humidif	0.0	0	0.0	0.0
										Wall	365	292	Opt Vent	0.0	0	0.0	0.0
										Ext Door	0	0	Total	-6.0			
Total	2.1	25.5															

System Checksums

By MFIA Inc.

community

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES			
Peaked at Time:		Mo/Hr: 8 / 9			Mo/Hr: Sum of		Mo/Hr: Heating Design				Cooling		Heating		
Outside Air:		OADB/WB/HR: 71 / 55 / 38			OADB: Peaks		OADB: 23				SADB	55.0	73.7		
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total		Space Sensible	Percent Of Total	Space Peak	Coil Peak	Percent		Ra Plenum	75.4	70.0		
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)	Space Sens	Tot Sens	Of Total		Return	75.4	70.0		
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)	Btu/h	Btu/h	(%)		Ret/OA	74.7	61.8		
Envelope Loads					Envelope Loads			Envelope Loads				Fn MtrTD	0.0	0.0	
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00	Fn BldTD	0.0	0.0		
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00	Fn Frict	0.0	0.0		
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00					
Glass Solar	32,535	0	32,535	72	33,809	76	Glass Solar	0	0	0.00					
Glass/Door Cond	-783	0	-783	-2	-1,894	-4	Glass/Door Cond	-8,324	-8,324	31.44					
Wall Cond	0	0	0	0	0	0	Wall Cond	0	0	0.00					
Partition/Door	0	0	0	0	0	0	Partition/Door	0	0	0.00					
Floor	0	0	0	0	0	0	Floor	0	0	0.00					
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0	0					
Infiltration	0	0	0	0	0	0	Infiltration	0	0	0.00					
Sub Total ==>	31,752	0	31,752	70	31,915	72	Sub Total ==>	-8,324	-8,324	31.44					
Internal Loads					Internal Loads			Internal Loads				AIRFLOWS			
Lights	3,823	956	4,778	11	3,823	9	Lights	0	0	0.00	Diffuser	1,995	1,995		
People	14,000	0	14,000	31	8,575	19	People	0	0	0.00	Terminal	1,995	1,995		
Misc	0	0	0	0	0	0	Misc	0	0	0.00	Main Fan	1,995	1,995		
Sub Total ==>	17,823	956	18,778	41	12,398	28	Sub Total ==>	0	0	0.00	Sec Fan	0	0		
Ceiling Load	159	-159	0	0	159	0	Ceiling Load	0	0	0.00	Nom Vent	347	347		
Ventilation Load	0	0	-5,006	-11	0	0	Ventilation Load	0	-18,154	68.56	AHU Vent	347	347		
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0	0	Infil	0	0		
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	0	0	0.00	MinStop/Rh	0	0		
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0	0.00	Return	1,995	1,995		
Exhaust Heat	-138	-138	0	0	0	0	OA Preheat Diff.	0	0	0.00	Exhaust	347	347		
Sup. Fan Heat	0	0	0	0	0	0	RA Preheat Diff.	0	0	0.00	Rm Exh	0	0		
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0	0.00	Auxiliary	0	0		
Duct Heat Pkup	0	0	0	0	0	0					Leakage Dwn	0	0		
Underflr Sup Ht Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0	0.00	Leakage Ups	0	0		
Supply Air Leakage	0	0	0	0	0	0	Supply Air Leakage	0	0	0.00					
Grand Total ==>	49,733	658	45,386	100.00	44,472	100.00	Grand Total ==>	-8,324	-26,478	100.00	ENGINEERING CKS				
												Cooling			Heating
												% OA	17.4	17.4	
												cfm/ft²	1.42	1.42	
												cfm/ton	527.40		
												ft²/ton	370.16		
												Btu/hr-ft²	32.42	-18.91	
												No. People	35		

System Checksums

By MFIA Inc.

CORNER 2 BA- PTHP-2

System 2 - 2007/2010 - Packaged Terminal Heat Pump

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time: Mo/Hr: 8 / 16					Mo/Hr: 9 / 16			Mo/Hr: Heating Design						
Outside Air: OADB/WB/HR: 86 / 66 / 62					OADB: 82			OADB: 23						
Space Sens. + Lat.	Plenum Sens. + Lat.	Net Total	Percent Of Total		Space Sensible	Percent Of Total		Space Peak	Coil Peak	Percent			Cooling	Heating
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)		Space Sens	Tot Sens	Of Total				
Envelope Loads					Envelope Loads			Envelope Loads						
Skylite Solar	0	0	0	0	0	0	0	0	0	0.00	0	SADB	55.0	76.0
Skylite Cond	0	0	0	0	0	0	0	0	0	0.00	0	Ra Plenum	77.1	68.2
Roof Cond	0	0	0	0	0	0	0	0	0	0.00	0	Return	75.0	70.0
Glass Solar	4,719	0	4,719	37	5,455	49	0	0	0	0.00	0	Ret/OA	77.0	61.6
Glass/Door Cond	327	0	327	3	193	2	0	-1,740	-1,740	21.63	0	Fn MtrTD	0.0	0.0
Wall Cond	669	215	884	7	478	4	0	-1,190	-1,588	19.74	0	Fn BldTD	0.0	0.0
Partition/Door	0	0	0	0	0	0	0	0	0	0.00	0	Fn Frict	0.0	0.0
Floor	0	0	0	0	0	0	0	0	0	0.00	0			
Adjacent Floor	0	0	0	0	0	0	0	0	0	0	0			
Infiltration	0	0	0	0	0	0	0	0	0	0.00	0			
Sub Total ==>	5,714	215	5,929	46	6,126	55	0	-2,930	-3,328	41.38	0			
Internal Loads					Internal Loads			Internal Loads						
Lights	1,147	287	1,433	11	1,147	10	0	0	0	0.00	0			
People	0	0	0	0	0	0	0	0	0	0.00	0			
Misc	3,500	0	3,500	27	3,500	31	0	0	0	0.00	0			
Sub Total ==>	4,647	287	4,933	39	4,647	42	0	0	0	0.00	0			
Ceiling Load					Ceiling Load			Ceiling Load						
Ventilation Load	0	0	1,941	15	0	0	0	-398	0	0.00	0			
Adj Air Trans Heat	0	0	0	0	0	0	0	0	-4,715	58.62	0			
Dehumid. Ov Sizing			0	0			0	0	0	0.00	0			
Ov/Undr Sizing	0	0	0	0	0	0	0	0	0	0.00	0			
Exhaust Heat		0	0	0			0	0	0	0.00	0			
Sup. Fan Heat		0	0	0			0	0	0	0.00	0			
Ret. Fan Heat		0	0	0			0	0	0	0.00	0			
Duct Heat Pkup		0	0	0			0	0	0	0.00	0			
Underflr Sup Ht Pkup		0	0	0			0	0	0	0.00	0			
Supply Air Leakage		0	0	0			0	0	0	0.00	0			
Grand Total ==>	10,830	33	12,803	100.00	11,160	100.00	0	-3,328	-8,043	100.00	0			

AIRFLOWS		
	Cooling	Heating
Diffuser	501	501
Terminal	501	501
Main Fan	501	501
Sec Fan	0	0
Nom Vent	90	90
AHU Vent	90	90
Infil	0	0
MinStop/Rh	0	0
Return	501	501
Exhaust	90	90
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	18.0	18.0
cfm/ft²	0.72	0.72
cfm/ton	407.97	
ft²/ton	570.51	
Btu/hr-ft²	21.03	-14.36
No. People	0	

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR				Gross Total	Glass		Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh	MBh	cfm	°F °F	gr/lb	°F °F	gr/lb			ft²	(%)	MBh	cfm	°F	°F	
Main Clg	1.2	14.7	12.0	501	77.1 60.6	52.8	55.0 50.1	45.9		Floor	700		Main Htg	-10.1	501	61.6	76.0
Aux Clg	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Part	0		Aux Htg	0.0	0	0.0	0.0
Opt Vent	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0 0.0	0.0		Int Door	0		Preheat	0.0	0	0.0	0.0
										ExFlr	0						
Total	1.2	14.7								Roof	0	0	Humidif	0.0	0	0.0	0.0
										Wall	560	126	Opt Vent	0.0	0	0.0	0.0
										Ext Door	0	0	Total	-10.1			

System Checksums

By MFIA Inc.

IHP/OHP-3 2ND FLOOR LOBBY

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK		HEATING COIL PEAK			TEMPERATURES		
Peaked at Time: Mo/Hr: 7 / 9					Mo/Hr: Sum of		Mo/Hr: Heating Design			Cooling Heating		
Outside Air: OADB/WB/HR: 71 / 56 / 40					OADB: Peaks		OADB: 23			SADB		
Space Sens. + Lat. Btu/h	Plenum Sens. + Lat. Btu/h	Net Total Btu/h	Percent Of Total (%)		Space Sensible Btu/h	Percent Of Total (%)	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)	Ra Plenum		
Envelope Loads							Envelope Loads			Return		
Skylite Solar	0	0	0	0	0	0	0	0	0.00	75.3	69.9	
Skylite Cond	0	0	0	0	0	0	0	0	0.00	75.3	69.9	
Roof Cond	0	0	0	0	0	0	0	0	0.00	75.2	68.6	
Glass Solar	20,781	0	20,781	82	20,781	85	0	0	0.00	0.0	0.0	
Glass/Door Cond	-305	0	-305	-1	-305	-1	-3,330	-3,330	55.96	0.0	0.0	
Wall Cond	0	14	14	0	0	0	0	-269	4.52	0.0	0.0	
Partition/Door	0	0	0	0	0	0	0	0	0.00	0.0	0.0	
Floor	0	0	0	0	0	0	0	0	0.00	0.0	0.0	
Adjacent Floor	0	0	0	0	0	0	0	0	0			
Infiltration	0	0	0	0	0	0	0	0	0.00			
Sub Total ==>	20,476	14	20,491	80	20,476	84	-3,330	-3,599	60.49			
Internal Loads							Internal Loads			Diffuser		
Lights	2,048	512	2,560	10	2,048	8	0	0	0.00	1,615	1,615	
People	3,375	0	3,375	13	1,875	8	0	0	0.00	1,615	1,615	
Misc	0	0	0	0	0	0	0	0	0.00	1,615	1,615	
Sub Total ==>	5,423	512	5,935	23	3,923	16	0	0	0.00	0	0	
Ceiling Load							Ceiling Load			Nom Vent		
Ventilation Load	0	0	-954	-4	0	0	-31	0	0.00	45	45	
Adj Air Trans Heat	0	0	0	0	0	0	0	-2,358	39.63	45	45	
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0	0.00	0	0	
Ov/Undr Sizing	0	0	0	0	0	0	0	0	0.00	0	0	
Exhaust Heat	0	-13	-13	0	0	0	0	7	-0.11	0	0	
Sup. Fan Heat	0	0	0	0	0	0	0	0	0.00	1,615	1,615	
Ret. Fan Heat	0	0	0	0	0	0	0	0	0.00	45	45	
Duct Heat Pkup	0	0	0	0	0	0	0	0	0.00	0	0	
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0	0.00	0	0	
Supply Air Leakage	0	0	0	0	0	0	0	0	0.00	0	0	
Grand Total ==>	25,960	452	25,458	100.00	24,460	100.00	-3,361	-5,950	100.00			

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
Total Capacity ton	MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB/WB/HR °F	°F	gr/lb	Leave DB/WB/HR °F	°F	gr/lb	Gross Total	Glass ft²	(%)	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F	
Main Clg	2.1	25.5	24.7	1,615	75.2	62.5	64.3	61.4	57.3	Floor	750		Main Htg	-6.0	1,615	68.6	71.9
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	Part	0		Aux Htg	0.0	0	0.0	0.0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	Int Door	0		Preheat	0.0	0	0.0	0.0
										ExFlr	0						
Total	2.1	25.5								Roof	0	0	Humidif	0.0	0	0.0	0.0
										Wall	365	292	Opt Vent	0.0	0	0.0	0.0
										Ext Door	0	0	Total	-6.0			

System Checksums

By MFIA Inc.

IHP/OHP-7&8 - 1st floor lobby

Incremental Heat Pump

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 8 / 10			Mo/Hr: Sum of		Mo/Hr: Heating Design				Cooling		Heating	
Outside Air:		OADB/WB/HR: 75 / 57 / 43			OADB: Peaks		OADB: 23				SADB	55.0	76.7	
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total	Space Peak	Coil Peak	Percent					
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Space Sens	Tot Sens	Of Total					
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Btu/h	Btu/h	(%)					
Envelope Loads					Envelope Loads					Envelope Loads				
Skylite Solar	0	0	0	0	0	0	0	0	0.00					
Skylite Cond	0	0	0	0	0	0	0	0	0.00					
Roof Cond	0	0	0	0	0	0	0	0	0.00					
Glass Solar	32,921	0	32,921	80	32,921	85	0	0	0.00					
Glass/Door Cond	-569	0	-569	-1	-569	-1	-11,904	-11,904	69.73					
Wall Cond	14	9	23	0	14	0	-738	-1,451	8.50					
Partition/Door	0		0	0	0	0	0	0	0.00					
Floor	0		0	0	0	0	0	0	0.00					
Adjacent Floor	0	0	0	0	0	0	0	0	0					
Infiltration	0		0	0	0	0	0	0	0.00					
Sub Total ==>	32,366	9	32,375	79	32,366	84	-12,642	-13,355	78.23					
Internal Loads					Internal Loads					Internal Loads				
Lights	3,249	812	4,061	10	3,249	8	0	0	0.00					
People	5,355	0	5,355	13	2,975	8	0	0	0.00					
Misc	0	0	0	0	0	0	0	0	0.00					
Sub Total ==>	8,604	812	9,416	23	6,224	16	0	0	0.00					
Ceiling Load	129	-129	0	0	129	0	-112	0	0.00					
Ventilation Load	-562	0	-562	-1	-36	0	-159	-159	0.93					
Adj Air Trans Heat	0		0	0	0	0	0	0	0					
Dehumid. Ov Sizing			0	0			0	0	0.00					
Ov/Undr Sizing	0		0	0	0	0		24	-0.14					
Exhaust Heat		-27	-27	0				-3,582	20.98					
Sup. Fan Heat			0	0				0	0.00					
Ret. Fan Heat		0	0	0				0	0.00					
Duct Heat Pkup		0	0	0										
Underflr Sup Ht Pkup			0	0				0	0.00					
Supply Air Leakage		0	0	0				0	0.00					
Grand Total ==>	40,537	664	41,202	100.00	38,684	100.00	-12,914	-17,072	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	1,735	1,735
Terminal	1,735	1,735
Main Fan	1,735	1,735
Sec Fan	0	0
Nom Vent	71	71
AHU Vent	71	71
Infil	0	0
MinStop/Rh	0	0
Return	1,807	1,807
Exhaust	71	71
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	4.1	4.1
cfm/ft²	1.46	1.46
cfm/ton	494.31	
ft²/ton	339.01	
Btu/hr-ft²	35.40	-14.35
No. People	12	

COOLING COIL SELECTION										AREAS				HEATING COIL SELECTION					
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass		Capacity	Coil Airflow	Ent	Lvg		
	ton	MBh	MBh	cfm	°F	°F	gr/lb	°F	°F	gr/lb		ft²	(%)	MBh	cfm	°F	°F		
Main Clg	3.4	41.2	39.4	1,735	75.3	60.1	53.4	55.0	51.7	51.7	Floor	1,190		Main Htg	-13.5	1,735	69.7	76.7	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	0		Aux Htg	0.0	0	0.0	0.0	
Opt Vent	0.1	0.9	0.9	71	86.6	66.2	63.8	75.0	62.3	63.8	Int Door	0		Preheat	0.0	0	0.0	0.0	
											ExFlr	0							
											Roof	0	0	0	Humidif	0.0	0	0.0	0.0
Total	3.5	42.1									Wall	1,358	964	71	Opt Vent	-3.6	71	23.0	68.0
											Ext Door	0	0	0	Total	-17.1			

By MFIA Inc.

office

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK		HEATING COIL PEAK			
Peaked at Time:		Mo/Hr: 8 / 9			Mo/Hr: Sum of		Mo/Hr: Heating Design			
Outside Air:		OADB/WB/HR: 71 / 55 / 38			OADB: Peaks		OADB: 23			
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total	Space Peak Space Sens	Coil Peak Tot Sens	Percent Of Total	
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Btu/h	Btu/h	(%)	
Envelope Loads					Envelope Loads					
Skylite Solar	0	0	0	0	0	0	0	0	0.00	
Skylite Cond	0	0	0	0	0	0	0	0	0.00	
Roof Cond	0	0	0	0	0	0	0	0	0.00	
Glass Solar	17,268	0	17,268	88	17,268	90	0	0	0.00	
Glass/Door Cond	-257	0	-257	-1	-257	-1	-2,737	-2,737	53.92	
Wall Cond	0	0	0	0	0	0	0	0	0.00	
Partition/Door	0	0	0	0	0	0	0	0	0.00	
Floor	0	0	0	0	0	0	0	0	0.00	
Adjacent Floor	0	0	0	0	0	0	0	0	0	
Infiltration	0	0	0	0	0	0	0	0	0.00	
Sub Total ==>	17,010	0	17,010	87	17,010	89	-2,737	-2,737	53.92	
Internal Loads					Internal Loads					
Lights	1,283	321	1,604	8	1,283	7	0	0	0.00	
People	1,479	0	1,479	8	822	4	0	0	0.00	
Misc	0	0	0	0	0	0	0	0	0.00	
Sub Total ==>	2,762	321	3,083	16	2,105	11	0	0	0.00	
Ceiling Load	43	-43	0	0	43	0	0	0	0.00	
Ventilation Load	0	0	-556	-3	0	0	0	-2,338	46.08	
Adj Air Trans Heat	0	0	0	0	0	0	0	0	0	
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0	0.00	
Ov/Undr Sizing	0	0	0	0	0	0	0	0	0.00	
Exhaust Heat	0	-14	-14	0	0	0	0	0	0.00	
Sup. Fan Heat	0	0	0	0	0	0	0	0	0.00	
Ret. Fan Heat	0	0	0	0	0	0	0	0	0.00	
Duct Heat Pkup	0	0	0	0	0	0	0	0	0.00	
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0	0.00	
Supply Air Leakage	0	0	0	0	0	0	0	0	0.00	
Grand Total ==>	19,816	263	19,523	100.00	19,158	100.00	-2,737	-5,075	100.00	

TEMPERATURES		
	Cooling	Heating
SADB	55.0	72.9
Ra Plenum	75.3	70.0
Return	75.3	70.0
Ret/OA	75.1	67.6
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS		
	Cooling	Heating
Diffuser	859	859
Terminal	859	859
Main Fan	859	859
Sec Fan	0	0
Nom Vent	45	45
AHU Vent	45	45
Infil	0	0
MinStop/Rh	0	0
Return	859	859
Exhaust	45	45
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	5.2	5.2
cfm/ft²	1.83	1.83
cfm/ton	528.18	
ft²/ton	288.89	
Btu/hr-ft²	41.54	-10.80
No. People	3	

COOLING COIL SELECTION										
	Total Capacity ton	MBh	Sens Cap. MBh	Coil Airflow cfm	Enter °F	DB/WB/HR °F gr/lb	Leave DB/WB/HR °F °F gr/lb			
Main Clg	1.6	19.5	19.2	859	75.1	59.2	49.7	55.0	50.9	49.1
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1.6	19.5								

AREAS			
	Gross Total	Glass ft²	(%)
Floor	470		
Part	0		
Int Door	0		
ExFlr	0		
Roof	0	0	0
Wall	240	240	100
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-5.1	859	67.6	72.9
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-5.1			

System Checksums

By MFIA Inc.

TH IHP1A/1B-OHP1

Incremental Heat Pump

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 17			Mo/Hr: Sum of			Mo/Hr: Heating Design						
Outside Air:		OADB/WB/HR: 84 / 65 / 62			OADB: Peaks			OADB: 23						
Space Sens. + Lat.	Plenum Sens. + Lat.	Net Total	Percent Of Total		Space Sensible	Percent Of Total		Space Peak	Coil Peak	Percent		Cooling	Heating	
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)		Space Sens	Tot Sens	Of Total				
Btu/h	Btu/h	Btu/h	(%)		Btu/h	(%)		Btu/h	Btu/h	(%)				
Envelope Loads														
Skylite Solar	0	0	0	0	0	0	0	Skylite Solar	0	0	0.00	SADB	55.0	75.2
Skylite Cond	0	0	0	0	0	0	0	Skylite Cond	0	0	0.00	Ra Plenum	75.6	69.5
Roof Cond	0	0	0	0	0	0	0	Roof Cond	0	0	0.00	Return	75.7	69.5
Glass Solar	4,711	0	4,711	37	4,711	43	0	Glass Solar	0	0	0.00	Ret/OA	77.3	61.0
Glass/Door Cond	144	0	144	1	144	1	0	Glass/Door Cond	-1,243	-1,243	15.97	Fn MtrTD	0.0	0.0
Wall Cond	497	161	658	5	994	9	0	Wall Cond	-1,441	-1,879	24.14	Fn BldTD	0.0	0.0
Partition/Door	0	0	0	0	0	0	0	Partition/Door	0	0	0.00	Fn Frict	0.0	0.0
Floor	0	0	0	0	0	0	0	Floor	0	0	0.00			
Adjacent Floor	0	0	0	0	0	0	0	Adjacent Floor	0	0	0			
Infiltration	0	0	0	0	0	0	0	Infiltration	0	0	0.00			
Sub Total ==>	5,352	161	5,514	43	5,849	53	0	Sub Total ==>	-2,684	-3,122	40.11			
Internal Loads														
Lights	1,409	352	1,761	14	1,409	13	0	Lights	0	0	0.00	AIRFLOWS		
People	0	0	0	0	0	0	0	People	0	0	0.00	Cooling	Heating	
Misc	3,500	0	3,500	27	3,500	32	0	Misc	0	0	0.00	Diffuser	492	492
Sub Total ==>	4,909	352	5,261	41	4,909	45	0	Sub Total ==>	0	0	0.00	Terminal	492	492
Ceiling Load														
Ventilation Load	170	-170	0	0	208	2	0	Ceiling Load	-146	0	0.00	Main Fan	492	492
Adj Air Trans Heat	0	0	2,109	16	0	0	0	Ventilation Load	0	-4,715	60.58	Sec Fan	0	0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	Adj Air Trans Heat	0	0	0	Nom Vent	90	90
Ov/Undr Sizing	0	0	0	0	0	0	0	Ov/Undr Sizing	0	0	0.00	AHU Vent	90	90
Exhaust Heat	0	-63	-63	0	0	0	0	Exhaust Heat	54	-0.69	0	Infil	0	0
Sup. Fan Heat	0	0	0	0	0	0	0	OA Preheat Diff.	0	0.00	0	MinStop/Rh	0	0
Ret. Fan Heat	0	0	0	0	0	0	0	RA Preheat Diff.	0	0.00	0	Return	492	492
Duct Heat Pkup	0	0	0	0	0	0	0	Additional Reheat	0	0.00	0	Exhaust	90	90
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00	0	Rm Exh	0	0
Supply Air Leakage	0	0	0	0	0	0	0	Supply Air Leakage	0	0.00	0	Auxiliary	0	0
Grand Total ==>	10,431	281	12,821	100.00	10,966	100.00	0	Grand Total ==>	-2,830	-7,784	100.00	Leakage Dwn	0	0
												Leakage Ups	0	0

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION				
Total Capacity	Sens Cap.	Coil Airflow	Enter DB/WB/HR	Leave DB/WB/HR						Gross Total	Glass		CapacityCoil Airflow	Ent	Lvg		
ton	MBh	cfm	°F °F	gr/lb	°F °F	gr/lb	°F °F	gr/lb	°F °F		ft² (%)		MBh	cfm	°F °F	°F °F	
Main Clg	1.1	12.8	11.9	492	77.6	60.8	52.5	55.0	51.5	860			Main Htg	-7.8	492	61.0	75.2
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0			Aux Htg	0.0	0	0.0	0.0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0			Preheat	0.0	0	0.0	0.0
Total	1.1	12.8								0			Humidif	0.0	0	0.0	0.0
										0			Opt Vent	0.0	0	0.0	0.0
										600	90	15	Total	-7.8			
										0	0	0					