

System Checksums

By LIVE OAK CONSULTANTS

Franklin HVAC System

Single Zone

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 8 / 15		Mo/Hr: Sum of		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Cooling	Heating	
Outside Air:		OADB/WB/HR: 94 / 79 / 123		OADB: Peaks		OADB: 27		OADB: 27		OADB: 27		SADB	57.4	84.9
Space Sens. + Lat.	Plenum Sens. + Lat.	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Space Sens	Tot Sens	Percent Of Total	Ra Plenum	79.8	65.6
Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Btu/h	Btu/h	(%)	Btu/h	Btu/h	(%)	Return	75.0	70.0
Envelope Loads				Envelope Loads				Envelope Loads				Fn MtrTD	0.0	0.0
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Skylite Solar	0	0.00	Fn BldTD	0.0	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Skylite Cond	0	0.00	Fn Frict	0.0	0.0
Roof Cond	0	365	2	0	0	Roof Cond	-762	5.24	Roof Cond	0	0.00	AIRFLOWS		
Glass Solar	3,327	0	17	4,019	23	Glass Solar	0	0.00	Glass Solar	0	0.00	Diffuser	876	876
Glass/Door Cond	2,390	0	12	2,094	12	Glass/Door Cond	-5,847	40.18	Glass/Door Cond	-5,847	40.18	Terminal	876	876
Wall Cond	3,512	908	22	3,408	20	Wall Cond	-3,744	32.51	Wall Cond	-4,732	32.51	Main Fan	876	876
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00	Partition/Door	0	0.00	Sec Fan	0	0
Floor	23	23	0	23	0	Floor	-448	3.08	Floor	-448	3.08	Nom Vent	0	0
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0	Adjacent Floor	0	0	AHU Vent	0	0
Infiltration	3,032	3,032	15	943	5	Infiltration	-2,379	16.35	Infiltration	-2,379	16.35	Infil	50	50
Sub Total ==>	12,284	1,273	68	10,488	61	Sub Total ==>	-12,418	97.35	Sub Total ==>	-14,167	97.35	MinStop/Rh	0	0
Internal Loads				Internal Loads				Internal Loads				Return	876	876
Lights	1,484	636	11	1,484	9	Lights	0	0.00	Lights	0	0.00	Exhaust	0	0
People	1,950	0	10	1,000	6	People	0	0.00	People	0	0.00	Rm Exh	50	50
Misc	2,389	0	12	2,389	14	Misc	0	0.00	Misc	0	0.00	Auxiliary	0	0
Sub Total ==>	5,823	636	32	4,873	28	Sub Total ==>	0	0.00	Sub Total ==>	0	0.00	Leakage Dwn	0	0
Ceiling Load				Ceiling Load				Ceiling Load				Leakage Ups	0	0
Ventilation Load	0	-1,904	0	1,815	11	Ventilation Load	-1,750	0.00	Ventilation Load	0	0.00	ENGINEERING CKS		
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0.00	Adj Air Trans Heat	0	0.00	% OA	0.0	0.0
Dehumid. Ov Sizing	0	0	0	0	0	Dehumid. Ov Sizing	-386	2.65	Dehumid. Ov Sizing	-386	2.65	cfm/ft²	0.71	0.71
Ov/Undr Sizing	0	0	0	0	0	Ov/Undr Sizing	0	0.00	Ov/Undr Sizing	0	0.00	cfm/ton	525.30	525.30
Exhaust Heat	0	0	0	0	0	Exhaust Heat	0	0.00	Exhaust Heat	0	0.00	ft²/ton	744.62	744.62
Sup. Fan Heat	0	0	0	0	0	Sup. Fan Heat	0	0.00	Sup. Fan Heat	0	0.00	Btu/hr-ft²	16.12	-11.72
Ret. Fan Heat	0	0	0	0	0	Ret. Fan Heat	0	0.00	Ret. Fan Heat	0	0.00	No. People	4	4
Duct Heat Pkup	0	0	0	0	0	Duct Heat Pkup	0	0.00	Duct Heat Pkup	0	0.00			
Underflr Sup Ht Pkup	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00	Underflr Sup Ht Pkup	0	0.00			
Supply Air Leakage	0	0	0	0	0	Supply Air Leakage	0	0.00	Supply Air Leakage	0	0.00			
Grand Total ==>	20,011	5	100.00	17,176	100.00	Grand Total ==>	-14,554	100.00	Grand Total ==>	-14,554	100.00			

COOLING COIL SELECTION										AREAS				HEATING COIL SELECTION				
	Total Capacity		Sens Cap. MBh	Coil Airflow cfm	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass ft²	Glass (%)	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F	
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb								
Main Clg	1.7	20.0	17.1	876	75.0	62.5	64.8	57.4	54.8	60.2	Floor	1,242	Main Htg	-14.6	876	70.0	84.9	
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	621	Humidif	0.0	0	0.0	0.0	
Total	1.7	20.0									Roof	648	Opt Vent	0.0	0	0.0	0.0	
											Wall	1,958	Total	-14.6				
											Ext Door	42						