

# System Checksums

By RLF

AHU

Bypass VAV

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK			TEMPERATURES		
Peaked at Time: Mo/Hr: 6 / 16					Mo/Hr: 6 / 18			Mo/Hr: Heating Design					
Outside Air: OADB/WB/HR: 94 / 75 / 99					OADB: 91			OADB: 38					
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	(%)			
<b>Envelope Loads</b>					<b>Envelope Loads</b>								
Skylite Solar	0	0	0	0	0	0	0	0	0	0.00	SADB	55.1	70.0
Skylite Cond	0	0	0	0	0	0	0	0	0	0.00	Ra Plenum	81.1	59.4
Roof Cond	0	11,229	11,229	24	0	0	0	0	-2,739	9.18	Return	81.1	59.4
Glass Solar	3,773	0	3,773	8	3,980	12	0	0	0	0.00	Ret/OA	81.7	58.5
Glass/Door Cond	2,089	0	2,089	4	1,937	6	0	-3,294	-3,294	11.04	Fn MtrTD	0.0	0.0
Wall Cond	2,296	648	2,944	6	2,694	8	0	-3,086	-3,870	12.98	Fn BldTD	0.0	0.0
Partition/Door	11,122	0	11,122	24	11,281	35	0	-12,264	-12,264	41.11	Fn Frict	0.0	0.0
Floor	0	0	0	0	0.00	0	0	-613	-613	2.06			
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00			
Infiltration	0	0	0	0	0	0	0	0	0	0.00			
Sub Total ==>	19,280	11,877	31,157	66	19,892	62	0	-19,257	-22,780	76.37			
<b>Internal Loads</b>					<b>Internal Loads</b>								
Lights	2,796	699	3,495	7	2,796	9	0	0	0	0.00	<b>AIRFLOWS</b>		
People	4,500	0	4,500	10	2,500	8	0	0	0	0.00	Cooling		
Misc	5,188	0	5,188	11	5,188	16	0	0	0	0.00	Heating		
Sub Total ==>	12,484	699	13,183	28	10,484	33	0	0	0	0.00	Diffuser	1,453	439
Ceiling Load	1,974	-1,974	0	0	1,745	5	0	-3,426	0	0.00	Terminal	1,453	439
Ventilation Load	0	0	3,106	7	0	0	0	0	-2,184	7.32	Main Fan	1,453	1,462
Adj Air Trans Heat	0	0	0	0	0	0	0	0	0	0	Sec Fan	0	0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0	0	0.00	Nom Vent	61	61
Ov/Undr Sizing	0	0	0	0	0	0	0	0	0	0.00	AHU Vent	61	61
Exhaust Heat	0	-415	-415	-1	0	0	0	0	721	-2.42	Infil	0	0
Sup. Fan Heat	0	0	0	0	0	0	0	0	0	0.00	MinStop/Rh	439	439
Ret. Fan Heat	0	0	0	0	0	0	0	0	0	0.00	Return	1,453	1,453
Duct Heat Pkup	0	0	0	0	0	0	0	0	0	0.00	Exhaust	61	61
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0	0	0.00	Rm Exh	0	0
Supply Air Leakage	0	0	0	0	0	0	0	0	0	0.00	Auxiliary	0	0
Grand Total ==>	33,738	10,187	47,031	100.00	32,122	100.00	0	-22,683	-29,828	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			Capacity	Coil Airflow	Ent	Lvg	
ton	MBh	MBh	cfm	°F	°F	gr/lb	°F	°F	gr/lb		ft²	(%)		MBh	cfm	°F	°F	
Main Clg	3.9	47.0	43.3	1,436	81.7	63.5	59.0	55.1	52.3	1,024				Main Htg	-29.9	0	0.0	0.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	1,444				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
										38				Reheat	-7.3	439	55.1	70.0
Total	3.9	47.0								1,024	0	0		Humidif	0.0	0	0.0	0.0
										427	100	23		Opt Vent	0.0	0	0.0	0.0
										24	0	0		Total	-29.9			