

System Checksums

By USACE

AHU-1

Variable Volume Reheat (30% Min Flow Default)

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				Cooling Heating		
Outside Air: OADB/WB/HR: 83 / 62 / 73					OADB: 83			OADB: -1				SADB	59.5	82.5
												Ra Plenum	76.0	68.2
												Return	76.0	68.2
												Ret/OA	76.2	59.0
												Fn MtrTD	0.1	0.0
												Fn BldTD	0.1	0.0
												Fn Frict	0.4	0.0
												AIRFLOWS		
												Cooling Heating		
												Diffuser	4,845	1,544
												Terminal	4,845	1,544
												Main Fan	4,845	1,544
												Sec Fan	0	0
												Nom Vent	563	563
												AHU Vent	563	563
												Infil	0	0
												MinStop/Rh	1,544	1,544
												Return	4,845	1,544
												Exhaust	563	563
												Rm Exh	0	0
												Auxiliary	0	0
												Leakage Dwn	0	0
												Leakage Ups	0	0
												ENGINEERING CKS		
												Cooling Heating		
												% OA	11.6	36.5
												cfm/ft²	1.16	0.37
												cfm/ton	713.27	
												ft²/ton	616.88	
												Btu/hr-ft²	19.45	-9.61
												No. People	44	

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	6.8	81.5	73.3	4,845	76.2	61.7	81.3	59.0	55.6	78.4	Floor	4,190	Main Htg	-31.9	1,544	59.0	82.5
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	-2.9	563	53.1	59.0
											ExFlr	0	Reheat	-15.0	1,544	59.0	70.0
Total	6.8	81.5									Roof	0	Humidif	0.0	0	0.0	0.0
											Wall	2,193	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	Total	-40.3			

System Checksums

By USACE

AHU-2

Variable Volume Reheat (30% Min Flow Default)

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES		
Peaked at Time: Mo/Hr: 7 / 17					Mo/Hr: 7 / 15			Mo/Hr: Heating Design				Cooling Heating		
Outside Air: OADB/WB/HR: 83 / 62 / 73					OADB: 86			OADB: -1				SADB	59.9	83.5
												Ra Plenum	75.9	68.2
												Return	75.9	68.2
												Ret/OA	76.1	59.3
												Fn MtrTD	0.1	0.0
												Fn BldTD	0.1	0.0
												Fn Frict	0.4	0.0
												AIRFLOWS		
												Cooling Heating		
												Diffuser	4,298	1,348
												Terminal	4,298	1,348
												Main Fan	4,298	1,348
												Sec Fan	0	0
												Nom Vent	455	455
												AHU Vent	455	455
												Infil	0	0
												MinStop/Rh	1,348	1,348
												Return	4,298	1,348
												Exhaust	455	455
												Rm Exh	0	0
												Auxiliary	0	0
												Leakage Dwn	0	0
												Leakage Ups	0	0
												ENGINEERING CKS		
												Cooling Heating		
												% OA	10.6	33.8
												cfm/ft²	1.09	0.34
												cfm/ton	742.62	
												ft²/ton	682.98	
												Btu/hr-ft²	17.57	-8.97
												No. People	38	

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 (%)		CapacityCoil Airflow MBh cfm	Ent °F	Lvg °F		
Main Clg	5.8	69.5	62.2	4,225	76.1	61.7	81.4	59.3	55.7	78.4	Floor	3,953	Main Htg	-28.5	1,348	59.3	83.5
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	-2.5	455	53.1	59.3
											ExFlr	0	Reheat	-12.6	1,348	59.3	70.0
Total	5.8	69.5									Roof	0	Humidif	0.0	0	0.0	0.0
											Wall	2,044	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	Total	-35.4			