

CECIS GOMEZ PALACIOS

Location	DURANGO, GOMEZ PALACIOS
Building owner	INFONAVIT
Program user	ING MEZA
Company	INGENOR
Comments	

By	Trial
Dataset name	C:\Users\AMH\Documents\TRACE 700 Projects\CEDIS-AGOMEZPAL-01.trc

Calculation time	05:56 PM on 11/07/2017
TRACE® 700 version	6.3.2

Location	Gomez Palacios, MÚxico	
Latitude	25.1	deg
Longitude	104.1	deg
Time Zone	6	
Elevation	4,101	ft
Barometric pressure	29.8	in. Hg
Air density	0.0759	lb/cu ft
Air specific heat	0.2444	Btu/lb·°F
Density-specific heat product	1.1127	Btu/h·cfm·°F
Latent heat factor	4,898.1	Btu·min/h·cu ft
Enthalpy factor	4.5521	lb·min/hr·cu ft
Summer design dry bulb	92.8	°F
Summer design wet bulb	71.6	°F
Winter design dry bulb	60.8	°F
Summer clearness number	1.00	
Winter clearness number	1.00	
Summer ground reflectance	0.20	
Winter ground reflectance	0.20	
Carbon Dioxide Level	400	ppm
Design simulation period	January - December	
Cooling load methodology	CLTD-CLF (ASHRAE TFM)	
Heating load methodology	UATD	



System Checksums

By Trial

UP CECIS GOMEZ PALACIOS

Packaged Terminal Air Conditioner

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES											
Peaked at Time:		Mo/Hr: 8 / 16		Mo/Hr: Sum of		Mo/Hr: Heating Design					Cooling		Heating									
Outside Air:		OADB/WB/HR: 92 / 80 / 138		OADB: Peaks		OADB: 61					SADB	55.0	71.7									
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	Coil Peak Tot Sens	Percent Of Total	Return	75.0	70.0								
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h		Btu/h	Btu/h		Ret/OA	75.6	70.0								
Envelope Loads				Envelope Loads							Fn MtrTD		0.1	0.0								
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00				Fn BldTD	0.1	0.0								
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00				Fn Frict	0.4	0.0								
Roof Cond	44,056	0	44,056	15	43,926	19	Roof Cond	23.09	-5,505	-5,505		AIRFLOWS										
Glass Solar	36,814	0	36,814	13	37,170	16	Glass Solar	0.00	0	0.00	Cooling				Heating							
Glass/Door Cond	4,766	0	4,766	2	4,670	2	Glass/Door Cond	13.87	-3,309	-3,309	Diffuser				10,243	10,243						
Wall Cond	36,907	0	36,907	13	36,874	16	Wall Cond	27.35	-6,522	-6,522	Terminal				10,243	10,243						
Partition/Door	6,434	0	6,434	2	6,345	3	Partition/Door	19.04	-4,541	-4,541	Main Fan				10,243	10,243						
Floor	0	0	0	0	0	0	Floor	0.00	0	0.00	Sec Fan				0	0						
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0	0	Nom Vent				388	0						
Infiltration	0	0	0	0	0	0	Infiltration	0.00	0	0.00	AHU Vent				388	0						
<i>Sub Total ==></i>	128,978	0	128,978	45	128,985	57	<i>Sub Total ==></i>	83.36	-19,877	-19,877	Infil				0	0						
											MinStop/Rh				0	0						
Internal Loads				Internal Loads							Return		10,243	10,243								
Lights	33,102	6,773	39,875	14	33,102	15	Lights	0.00	0	0.00	Exhaust	388	0									
People	36,574	0	36,574	13	19,354	8	People	0.00	0	0.00	Rm Exh	0	0									
Misc	46,500	0	46,500	16	46,500	20	Misc	0.00	0	0.00	Auxiliary	0	0									
<i>Sub Total ==></i>	116,176	6,773	122,949	43	98,956	43	<i>Sub Total ==></i>	0.00	0	0.00	Leakage Dwn	0	0									
											Leakage Ups	0	0									
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00			ENGINEERING CKS											
Ventilation Load	0	0	27,658	10	0	Ventilation Load	0	0.00						% OA	3.8	0.0						
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0						cfm/ft²	2.14	2.14						
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	0	0.00						cfm/ton	430.62							
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00						ft²/ton	201.69							
Exhaust Heat	0	-228	-228	0	0	OA Preheat Diff.	2,502	-10.49						Btu/hr-ft²	59.50	0.00						
Sup. Fan Heat	0	0	6,070	2	0	RA Preheat Diff.	-6,471	27.14						No. People	84							
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00						HEATING COIL SELECTION								
Duct Heat Pkup	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00									Capacity	MBh	Coil Airflow	cfm	Ent °F	Lvg °F
Underflr Sup Ht Pkup	0	0	0	0	0	Supply Air Leakage	0	0.00									Main Htg	0.0	10,243	69.7	71.7	
Supply Air Leakage	0	0	0	0	0						Aux Htg	0.0	0				0.0	0.0				
<i>Grand Total ==></i>	245,154	6,545	285,427	100.00	227,941	100.00	<i>Grand Total ==></i>	100.00	-19,877	-23,845	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	0.0										

COOLING COIL SELECTION										
	Total Capacity		Sens Cap. MBh	Coil Airflow cfm	Enter DB/WB/HR			Leave DB/WB/HR		
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb
Main Clg	23.8	285.4	247.5	10,243	76.7	62.3	61.0	55.0	52.7	55.7
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	23.8	285.4								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	4,797		
Part	1,272		
Int Door	0		
ExFlr	0		
Roof	4,797	0	0
Wall	1,870	349	19
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
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	0.0			

Zone Checksums

By Trial

GOMEZ PALACIOS AREA 1

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 11 / 17		Mo/Hr: 12 / 17		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 90 / 79 / 132		OADB: 89		OADB: 61						SADB	55.0	71.5
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	75.0	70.0
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h		Btu/h	Btu/h		Return	75.4	70.0
Envelope Loads				Envelope Loads								Ret/OA	75.6	70.0
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	0	0	0.00	Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	0	0	0.00	Fn BldTD	0.1	0.0
Roof Cond	2,360	0	2,360	6	2,229	7	Roof Cond	-390	-390	15.44		Fn Frict	0.4	0.0
Glass Solar	13,819	0	13,819	38	14,175	45	Glass Solar	0	0	0.00				
Glass/Door Cond	1,181	0	1,181	3	1,085	3	Glass/Door Cond	-844	-844	33.40				
Wall Cond	2,895	0	2,895	8	2,862	9	Wall Cond	-381	-381	15.09				
Partition/Door	1,080	0	1,080	3	991	3	Partition/Door	-702	-702	27.80				
Floor	0	0	0	0	0	0	Floor	0	0	0.00				
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0	0.00				
Infiltration	0	0	0	0	0	0	Infiltration	0	0	0.00				
<i>Sub Total ==></i>	21,335	0	21,335	58	21,342	68	<i>Sub Total ==></i>	-2,318	-2,318	91.73				
Internal Loads				Internal Loads								AIRFLOWS		
Lights	2,547	637	3,184	9	2,547	8	Lights	0	0	0.00				
People	5,275	0	5,275	14	2,815	9	People	0	0	0.00				
Misc	4,670	0	4,670	13	4,670	15	Misc	0	0	0.00				
<i>Sub Total ==></i>	12,493	637	13,130	36	10,033	32	<i>Sub Total ==></i>	0	0	0.00				
Ceiling Load	0	0	0	0	0	0	Ceiling Load	0	0	0.00				
Ventilation Load	0	0	1,395	4	0	0	Ventilation Load	0	0	0.00				
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0	0				
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	0	0	0.00				
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0	0.00				
Exhaust Heat	0	-9	-9	0	0	0	OA Preheat Diff.	0	132	-5.21				
Sup. Fan Heat	0	0	835	2	0	0	RA Preheat Diff.	0	-341	13.48				
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0	0.00				
Duct Heat Pkup	0	0	0	0	0	0	System Plenum Heat	0	0	0.00				
Underflr Sup Ht Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0	0.00				
Supply Air Leakage	0	0	0	0	0	0	Supply Air Leakage	0	0	0.00				
Grand Total ==>	33,828	628	36,686	100.00	31,375	100.00	Grand Total ==>	-2,318	-2,527	100.00				

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION					
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Lvg	Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb								ft²
Main Clg	3.1	36.7	33.2	1,410	76.2	61.5	58.3	55.0	52.4	54.7	Floor	340		0.0	1,410	69.9	71.5	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	197		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	3.1	36.7									Roof	340	0	0.0	0	0.0	0.0	
											Wall	178	89	50	0.0	0	0.0	0.0
											Ext Door	0	0	0	0.0	0	0.0	0.0

Room Checksums

By Trial

GOMEZ PALACIOS AREA 1

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES				
Peaked at Time:		Mo/Hr: 11 / 17		Mo/Hr: 12 / 17		Mo/Hr: Heating Design			Cooling		Heating	SADB	55.0	71.5	
Outside Air:		OADB/WB/HR: 90 / 79 / 132		OADB: 89		OADB: 61			Ra Plenum		70.0	Return	75.4	70.0	
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Ret/OA <td colspan="1">75.6</td> <td colspan="1">70.0</td> <td colspan="1">Fn MtrTD</td> <td colspan="1">0.1</td> <td colspan="1">0.0</td>	75.6	70.0	Fn MtrTD	0.1	0.0	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h		Fn BldTD	0.1	0.0	Fn Frict	0.4	0.0	
Envelope Loads				Envelope Loads							AIRFLOWS				
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser		1,410	1,410			
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal		1,410	1,410			
Roof Cond	2,360	0	2,360	6	2,229	7	Roof Cond	-390	15.44	Main Fan		1,410	1,410		
Glass Solar	13,819	0	13,819	38	14,175	45	Glass Solar	0	0.00	Sec Fan		0	0		
Glass/Door Cond	1,181	0	1,181	3	1,085	3	Glass/Door Cond	-844	33.40	Nom Vent		20	0		
Wall Cond	2,895	0	2,895	8	2,862	9	Wall Cond	-381	15.09	AHU Vent		20	0		
Partition/Door	1,080	0	1,080	3	991	3	Partition/Door	-702	27.80	Infil		0	0		
Floor	0	0	0	0	0	0	Floor	0	0.00	MinStop/Rh		0	0		
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0.00	Return		1,410	1,410		
Infiltration	0	0	0	0	0	0	Infiltration	0	0.00	Exhaust		20	0		
Sub Total ==>	21,335	0	21,335	58	21,342	68	Sub Total ==>	-2,318	91.73	Rm Exh		0	0		
Internal Loads				Internal Loads							ENGINEERING CKS				
Lights	2,547	637	3,184	9	2,547	8	Lights	0	0.00	% OA		1.4	0.0		
People	5,275	0	5,275	14	2,815	9	People	0	0.00	cfm/ft²		4.15	4.15		
Misc	4,670	0	4,670	13	4,670	15	Misc	0	0.00	cfm/ton		461.16			
Sub Total ==>	12,493	637	13,130	36	10,033	32	Sub Total ==>	0	0.00	ft²/ton		111.24			
Grand Total ==>	33,828	628	36,686	100.00	31,375	100.00	Grand Total ==>	-2,318	-2,527	Btu/hr-ft²		107.88	0.00		
Ceiling Load	0	0	0	0	0	0	Ceiling Load	0	0.00	No. People		12.0	35.3/1000 ft²		
Ventilation Load	0	0	1,395	4	0	0	Ventilation Load	0	0.00						
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0						
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	0	0.00						
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0.00						
Exhaust Heat	0	-9	-9	0	0	0	OA Preheat Diff.	132	-5.21						
Sup. Fan Heat	0	0	835	2	0	0	RA Preheat Diff.	-341	13.48						
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0.00						
Duct Heat Pkup	0	0	0	0	0	0	System Plenum Heat	0	0.00						
Underflr Sup Ht Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00						
Supply Air Leakage	0	0	0	0	0	0	Supply Air Leakage	0	0.00						

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION					
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Lvg	Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	3.1	36.7	33.2	1,410	76.2	61.5	58.3	55.0	52.4	54.7	Floor	340		Main Htg	0.0	1,410	69.9	71.5
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	197		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	3.1	36.7									Roof	340	0	Humidif	0.0	0	0.0	0.0
											Wall	178	89	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	0.0			

Design Cooling Load Summary

By Trial
 CECIS GOMEZ PALACIOS
 DURANGO, GOMEZ PALACIOS

System - UP CECIS GOMEZ PALACIOS

Zone - GOMEZ PALACIOS AREA 1

Room - GOMEZ PALACIOS AREA 1

Coil Location - Room

Coil Peak Calculation Time: November, hour 17

Ambient DB/WB/HR: 90 / 79 / 132

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	13,819		13,819	37.7%
Glass Transmission	1,181		1,181	3.2%
Wall Transmission	2,895		2,895	7.9%
Roof Transmission	2,360		2,360	6.4%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	1,080		1,080	2.9%
Net Ceiling Load	0		0	0.0%
Lighting	2,547		2,547	6.9%
People	2,815	2,460	5,275	14.4%
Misc. Equipment Loads	4,670	0	4,670	12.7%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	31,368	2,460	33,828	92.2%
Ventilation Load	334	1,061	1,395	3.8%
Exhaust Heat	-9	0	-9	0.0%
Supply Fan Load	835		835	2.3%
Return Fan Load	0		0	0.0%
Net Duct Heat Pickup	0		0	0.0%
Wall Load to Plenum	0		0	0.0%
Roof Load to Plenum	0		0	0.0%
Adj Floor to Plenum	0		0	0.0%
Lighting Load to Plenum	637		637	1.7%
Misc. Equip. Load to Plenum	0	0	0	0.0%
Glass Transmission to Plenum	0		0	0.0%
Glass Solar to Plenum	0		0	0.0%
Over/Under Sizing	0		0	0.0%
Reheat at Design	0	0	0	0.0%
Underfloor Sup Heat Pickup	0		0	0.0%
Supply Air Leakage	0	0	0	0.0%
Total Cooling Loads	33,165	3,521	36,686	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	76.2 / 61.5 °F
Coil Entering Humidity Ratio	58.29 gr/lb
Coil Leaving Air (DB / WB)	55.0 / 52.4 °F
Coil Leaving Humidity Ratio	54.66 gr/lb
Coil Sensible Load	33.17 MBh
Coil Total Load	36.69 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	1,409.85 cfm
Resulting Room Relative Humidity	44.05 %

General Engineering Checks

Total Cooling Load	3.1 ton
Area / Load	111.24 ft²/ton
Total Floor Area	340 ft²
Cooling Airflow	4.15 cfm/ft²
Airflow / Load	461.16 cfm/ton
Percent Outdoor Air	1.4 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

System Component Selection Summary

By Trial

Alternative 1

System Description: UP CECIS GOMEZ PALACIOS

System Type: Packaged Terminal Air Conditioner

Number of Zones: 6

Number of Rooms: 6

Component	Sizing Method	Location	Quantity
Cooling			
Main Clg Coil	Peak	Room	6
Primary Clg Fan	Peak	Room	6
Heating			
Main Htg Coil	Peak	Room	6
Miscellaneous			
System Exhaust Fan	Vent+Inf-RmExh	System	1
Return Fan	Return Airflow	System	1

Coil Location			Cooling Coil Selection											
System	Zone	Room	Component	Time Of Peak Mo/Hr	Total Capacity		Sensible Capacity MBh	Airflow At Coil Peak cfm	Enter DB/ WB/ HR			Leave DB/ WB/ HR		
					ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb
		GOMEZ PALACIOS AREA 1	Main Clg Coil	11/17	3.1	36.7	33.2	1,410	76.2	61.5	58.3	55.0	52.4	54.7
		GOMEZ PALACIOS COCINETA	Main Clg Coil	6/13	1.7	20.5	17.7	751	76.2	62.1	61.3	55.0	52.7	55.8
		GOMEZ PALACIOS OFICINA 1	Main Clg Coil	6/17	0.9	10.2	8.8	375	76.2	62.1	61.3	55.0	52.7	55.8
		GOMEZ PALACIOS OFICINA 2	Main Clg Coil	6/17	0.9	11.3	9.9	421	76.1	61.9	60.4	55.0	52.6	55.5
		GOMEZ PALACIOS SALA DE JUNTAS	Main Clg Coil	6/17	3.7	44.8	35.6	1,482	76.6	63.3	66.3	55.0	53.1	57.4
		GOMEZ PALACIOS VESTIBULO	Main Clg Coil	10/14	13.5	161.9	142.3	5,804	77.0	62.2	60.4	55.0	52.6	55.5

Coil Location			Heating Coil Selection				
System	Zone	Room	Component	Total Capacity MBh	Airflow cfm	Entering Dry Bulb °F	Leaving Dry Bulb °F
		GOMEZ PALACIOS AREA 1	Main Htg Coil	0.0	1,410	69.9	71.5
		GOMEZ PALACIOS COCINETA	Main Htg Coil	0.0	751	69.6	72.4
		GOMEZ PALACIOS OFICINA 1	Main Htg Coil	0.0	375	69.6	71.8
		GOMEZ PALACIOS OFICINA 2	Main Htg Coil	0.0	421	69.7	73.0
		GOMEZ PALACIOS SALA DE JUNTAS	Main Htg Coil	0.0	1,482	69.4	71.4
		GOMEZ PALACIOS VESTIBULO	Main Htg Coil	0.0	5,804	69.7	71.7

Component Location			Miscellaneous Component Selection							
System	Zone	Room	Component	Design Airflow		Outside Air %	SADB		Clg VAV Minimum cfm	Htg VAV Maximum cfm
				cfm	Ach/hr		Clg °F	Htg °F		
UP CECIS GOMEZ PALACIOS			System Exhaust Fan	388						
UP CECIS GOMEZ PALACIOS			Optional Vent Fan	388		100				
UP CECIS GOMEZ PALACIOS			Return Fan		10,243					

ROOM PSYCHROMETRIC STATE POINTS

By Trial

GOMEZ PALACIOS AREA 1

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	60.8	44.0	57.2	26.9	
Main System						
Return Fan						0.0
Return Air	75.4	61.0	43.5	57.2	27.0	
Return Air Heat Pickup						0.4
Outdoor Air	88.7	77.7	61.8	127.0	41.2	
Entering OA preconditioning	88.7	77.7	61.8	127.0	41.2	
Leaving OA preconditioning	88.7	77.7	61.8	127.0	41.2	
Return/Outdoor Air Mix	75.6	61.3	43.9	58.2	27.2	
Blow Through Fan						0.5
Entering Coil	76.1	61.5	43.2	58.2	27.4	
Leaving Coil	55.0	52.6	85.4	55.2	21.8	
Draw Through Fan						0.0
Fan Frictional Heat						0.0
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.6	85.4	55.2	21.8	
Supply Air	55.0	52.6	85.4	55.2	21.8	
Percent Outside Air	1.45	%				
Sensible Heat Ratio (SHR)	0.93					
Coil Airflow	1,410	cfm				

Warning: The psychrometric loop was unable to close to within an acceptable range. It is recommended that constraints be placed on the maximum/minimum supply air temperature on the 'Create Systems -- Temperatures' tab.

ROOM PSYCHROMETRIC STATE POINTS

By Trial

GOMEZ PALACIOS COCINETA

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	61.0	44.8	58.2	27.1	
Main System						
Return Fan						0.0
Return Air	75.0	61.0	44.8	58.2	27.1	
Return Air Heat Pickup						0.0
Outdoor Air	90.6	79.4	61.5	134.7	42.9	
Entering OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Leaving OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Return/Outdoor Air Mix	75.6	61.9	46.1	61.3	27.7	
Blow Through Fan						0.5
Entering Coil	76.2	62.1	45.3	61.3	27.9	
Leaving Coil	55.0	52.9	87.2	56.4	21.9	
Draw Through Fan						0.0
Fan Frictional Heat						0.0
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.9	87.2	56.4	21.9	
Supply Air	55.0	52.9	87.2	56.4	21.9	
Percent Outside Air	4.00	%				
Sensible Heat Ratio (SHR)	0.93					
Coil Airflow	751	cfm				

Warning: The psychrometric loop was unable to close to within an acceptable range. It is recommended that constraints be placed on the maximum/minimum supply air temperature on the 'Create Systems -- Temperatures' tab.

ROOM PSYCHROMETRIC STATE POINTS

By Trial

GOMEZ PALACIOS OFICINA 1

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	61.0	44.8	58.2	27.1	
Main System						
Return Fan						0.0
Return Air	75.0	61.0	44.8	58.2	27.1	
Return Air Heat Pickup						0.0
Outdoor Air	90.6	79.4	61.5	134.7	42.9	
Entering OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Leaving OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Return/Outdoor Air Mix	75.6	61.9	46.2	61.3	27.7	
Blow Through Fan						0.5
Entering Coil	76.2	62.1	45.3	61.3	27.9	
Leaving Coil	55.0	52.9	87.2	56.4	21.9	
Draw Through Fan						0.0
Fan Frictional Heat						0.0
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.9	87.2	56.4	21.9	
Supply Air	55.0	52.9	87.2	56.4	21.9	
Percent Outside Air	4.00	%				
Sensible Heat Ratio (SHR)	0.93					
Coil Airflow	375	cfm				

Warning: The psychrometric loop was unable to close to within an acceptable range. It is recommended that constraints be placed on the maximum/minimum supply air temperature on the 'Create Systems -- Temperatures' tab.

ROOM PSYCHROMETRIC STATE POINTS

By Trial

GOMEZ PALACIOS OFICINA 2

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	60.9	44.4	57.7	27.0	
Main System						
Return Fan						0.0
Return Air	75.0	60.9	44.4	57.7	27.0	
Return Air Heat Pickup						0.0
Outdoor Air	90.6	79.4	61.5	134.7	42.9	
Entering OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Leaving OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Return/Outdoor Air Mix	75.6	61.7	45.6	60.4	27.6	
Blow Through Fan						0.5
Entering Coil	76.1	61.9	44.8	60.4	27.7	
Leaving Coil	55.0	52.8	86.7	56.1	21.9	
Draw Through Fan						0.0
Fan Frictional Heat						0.0
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.8	86.7	56.1	21.9	
Supply Air	55.0	52.8	86.7	56.1	21.9	
Percent Outside Air	3.56	%				
Sensible Heat Ratio (SHR)	0.94					
Coil Airflow	421	cfm				

Warning: The psychrometric loop was unable to close to within an acceptable range. It is recommended that constraints be placed on the maximum/minimum supply air temperature on the 'Create Systems -- Temperatures' tab.

ROOM PSYCHROMETRIC STATE POINTS

By Trial

GOMEZ PALACIOS SALA DE JUNTAS

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	61.7	47.1	61.3	27.6	
Main System						
Return Fan						0.0
Return Air	75.0	61.7	47.1	61.3	27.6	
Return Air Heat Pickup						0.0
Outdoor Air	90.6	79.4	61.5	134.7	42.9	
Entering OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Leaving OA preconditioning	90.6	79.4	61.5	134.7	42.9	
Return/Outdoor Air Mix	76.1	63.2	49.1	66.3	28.6	
Blow Through Fan						0.5
Entering Coil	76.6	63.3	48.3	66.3	28.7	
Leaving Coil	55.0	53.2	89.5	57.9	22.2	
Draw Through Fan						0.0
Fan Frictional Heat						0.0
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	53.2	89.5	57.9	22.2	
Supply Air	55.0	53.2	89.5	57.9	22.2	
Percent Outside Air	6.75	%				
Sensible Heat Ratio (SHR)	0.89					
Coil Airflow	1,482	cfm				

Warning: The psychrometric loop was unable to close to within an acceptable range. It is recommended that constraints be placed on the maximum/minimum supply air temperature on the 'Create Systems -- Temperatures' tab.

ROOM PSYCHROMETRIC STATE POINTS

By Trial

GOMEZ PALACIOS VESTIBULO

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	60.9	44.3	57.6	27.0	
Main System						
Return Fan						0.0
Return Air	76.0	61.2	42.9	57.6	27.2	
Return Air Heat Pickup						1.0
Outdoor Air	91.5	79.7	60.2	135.6	43.3	
Entering OA preconditioning	91.5	79.7	60.2	135.6	43.3	
Leaving OA preconditioning	91.5	79.7	60.2	135.6	43.3	
Return/Outdoor Air Mix	76.5	62.1	44.2	60.4	27.8	
Blow Through Fan						0.5
Entering Coil	77.0	62.2	43.4	60.4	27.9	
Leaving Coil	55.0	52.8	86.7	56.0	21.9	
Draw Through Fan						0.0
Fan Frictional Heat						0.0
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.8	86.7	56.0	21.9	
Supply Air	55.0	52.8	86.7	56.0	21.9	
Percent Outside Air	3.57	%				
Sensible Heat Ratio (SHR)	0.94					
Coil Airflow	5,804	cfm				

Warning: The psychrometric loop was unable to close to within an acceptable range. It is recommended that constraints be placed on the maximum/minimum supply air temperature on the 'Create Systems -- Temperatures' tab.

System Component Selection Summary

By Trial

Component Location			Miscellaneous Component Selection							
System	Zone	Room	Component	Design Airflow		Outside Air %	SADB		Clg VAV Minimum cfm	Htg VAV Maximum cfm
				cfm	Ach/hr		Clg °F	Htg °F		
		GOMEZ PALACIOS AREA 1	Diffuser	1,410	20.2	1.5	55.0	71.0		
		GOMEZ PALACIOS AREA 1	Primary Fan	1,410	20.2	1.5	55.0			
		GOMEZ PALACIOS COCINETA	Diffuser	751	17.2	4.0	55.0	72.0		
		GOMEZ PALACIOS COCINETA	Primary Fan	751	17.2	4.0	55.0			
		GOMEZ PALACIOS OFICINA 1	Diffuser	375	11.8	4.0	55.0	72.0		
		GOMEZ PALACIOS OFICINA 1	Primary Fan	375	11.8	4.0	55.0			
		GOMEZ PALACIOS OFICINA 2	Diffuser	421	13.3	3.6	55.0	73.0		
		GOMEZ PALACIOS OFICINA 2	Primary Fan	421	13.3	3.6	55.0			
		GOMEZ PALACIOS SALA DE JUNTAS	Diffuser	1,482	15.1	6.8	55.0	71.0		
		GOMEZ PALACIOS SALA DE JUNTAS	Primary Fan	1,482	15.1	6.8	55.0			
		GOMEZ PALACIOS VESTIBULO	Diffuser	5,804	8.2	3.6	55.0	72.0		
		GOMEZ PALACIOS VESTIBULO	Primary Fan	5,804	8.2	3.6	55.0			

Design Cooling Load Summary

By Trial
 CECIS GOMEZ PALACIOS
 DURANGO, GOMEZ PALACIOS

System - UP CECIS GOMEZ PALACIOS

Zone - GOMEZ PALACIOS COCINETA

Room - GOMEZ PALACIOS COCINETA

Coil Location - Room

Coil Peak Calculation Time: June, hour 13
 Ambient DB/WB/HR: 91 / 79 / 135

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	1,848		1,848	9.0%
Glass Transmission	325		325	1.6%
Wall Transmission	7,721		7,721	37.6%
Roof Transmission	2,015		2,015	9.8%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	0		0	0.0%
Net Ceiling Load	0		0	0.0%
Lighting	1,139		1,139	5.6%
People	1,313	1,230	2,543	12.4%
Misc. Equipment Loads	2,346	0	2,346	11.4%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	16,707	1,230	17,937	87.5%
Ventilation Load	522	1,605	2,127	10.4%
Exhaust Heat	0	0	0	0.0%
Supply Fan Load	445		445	2.2%
Return Fan Load	0		0	0.0%
Net Duct Heat Pickup	0		0	0.0%
Wall Load to Plenum	0		0	0.0%
Roof Load to Plenum	0		0	0.0%
Adj Floor to Plenum	0		0	0.0%
Lighting Load to Plenum	0		0	0.0%
Misc. Equip. Load to Plenum	0	0	0	0.0%
Glass Transmission to Plenum	0		0	0.0%
Glass Solar to Plenum	0		0	0.0%
Over/Under Sizing	0		0	0.0%
Reheat at Design	0	0	0	0.0%
Underfloor Sup Heat Pickup	0		0	0.0%
Supply Air Leakage	0	0	0	0.0%
Total Cooling Loads	17,674	2,835	20,509	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	76.2 / 62.1 °F
Coil Entering Humidity Ratio	61.26 gr/lb
Coil Leaving Air (DB / WB)	55.0 / 52.7 °F
Coil Leaving Humidity Ratio	55.84 gr/lb
Coil Sensible Load	17.67 MBh
Coil Total Load	20.51 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	750.73 cfm
Resulting Room Relative Humidity	44.80 %

General Engineering Checks

Total Cooling Load	1.7 ton
Area / Load	124.76 ft ² /ton
Total Floor Area	213 ft ²
Cooling Airflow	3.52 cfm/ft ²
Airflow / Load	439.25 cfm/ton
Percent Outdoor Air	4.0 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

Design Cooling Load Summary

By Trial
 CECIS GOMEZ PALACIOS
 DURANGO, GOMEZ PALACIOS

System - UP CECIS GOMEZ PALACIOS

Zone - GOMEZ PALACIOS OFICINA 1

Room - GOMEZ PALACIOS OFICINA 1

Coil Location - Room

Coil Peak Calculation Time: June, hour 17
 Ambient DB/WB/HR: 91 / 79 / 135

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	487		487	4.8%
Glass Transmission	151		151	1.5%
Wall Transmission	2,065		2,065	20.2%
Roof Transmission	1,596		1,596	15.6%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	0		0	0.0%
Net Ceiling Load	0		0	0.0%
Lighting	958		958	9.3%
People	701	615	1,316	12.8%
Misc. Equipment Loads	2,384	0	2,384	23.3%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	8,341	615	8,956	87.4%
Ventilation Load	261	803	1,064	10.4%
Exhaust Heat	0	0	0	0.0%
Supply Fan Load	222		222	2.2%
Return Fan Load	0		0	0.0%
Net Duct Heat Pickup	0		0	0.0%
Wall Load to Plenum	0		0	0.0%
Roof Load to Plenum	0		0	0.0%
Adj Floor to Plenum	0		0	0.0%
Lighting Load to Plenum	0		0	0.0%
Misc. Equip. Load to Plenum	0	0	0	0.0%
Glass Transmission to Plenum	0		0	0.0%
Glass Solar to Plenum	0		0	0.0%
Over/Under Sizing	0		0	0.0%
Reheat at Design	0	0	0	0.0%
Underfloor Sup Heat Pickup	0		0	0.0%
Supply Air Leakage	0	0	0	0.0%
Total Cooling Loads	8,824	1,418	10,242	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	76.2 / 62.1 °F
Coil Entering Humidity Ratio	61.28 gr/lb
Coil Leaving Air (DB / WB)	55.0 / 52.7 °F
Coil Leaving Humidity Ratio	55.84 gr/lb
Coil Sensible Load	8.82 MBh
Coil Total Load	10.24 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	374.82 cfm
Resulting Room Relative Humidity	44.80 %

General Engineering Checks

Total Cooling Load	0.9 ton
Area / Load	181.29 ft ² /ton
Total Floor Area	155 ft ²
Cooling Airflow	2.42 cfm/ft ²
Airflow / Load	439.16 cfm/ton
Percent Outdoor Air	4.0 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

Design Cooling Load Summary

By Trial
 CECIS GOMEZ PALACIOS
 DURANGO, GOMEZ PALACIOS

System - UP CECIS GOMEZ PALACIOS

Zone - GOMEZ PALACIOS OFICINA 2

Room - GOMEZ PALACIOS OFICINA 2

Coil Location - Room

Coil Peak Calculation Time: June, hour 17
 Ambient DB/WB/HR: 91 / 79 / 135

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	487		487	4.3%
Glass Transmission	150		150	1.3%
Wall Transmission	2,064		2,064	18.3%
Roof Transmission	1,578		1,578	14.0%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	1,092		1,092	9.7%
Net Ceiling Load	0		0	0.0%
Lighting	939		939	8.3%
People	695	615	1,310	11.6%
Misc. Equipment Loads	2,366	0	2,366	20.9%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	9,370	615	9,985	88.3%
Ventilation Load	261	809	1,069	9.5%
Exhaust Heat	0	0	0	0.0%
Supply Fan Load	250		250	2.2%
Return Fan Load	0		0	0.0%
Net Duct Heat Pickup	0		0	0.0%
Wall Load to Plenum	0		0	0.0%
Roof Load to Plenum	0		0	0.0%
Adj Floor to Plenum	0		0	0.0%
Lighting Load to Plenum	0		0	0.0%
Misc. Equip. Load to Plenum	0	0	0	0.0%
Glass Transmission to Plenum	0		0	0.0%
Glass Solar to Plenum	0		0	0.0%
Over/Under Sizing	0		0	0.0%
Reheat at Design	0	0	0	0.0%
Underfloor Sup Heat Pickup	0		0	0.0%
Supply Air Leakage	0	0	0	0.0%
Total Cooling Loads	9,880	1,424	11,304	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	76.1 / 61.9 °F
Coil Entering Humidity Ratio	60.40 gr/lb
Coil Leaving Air (DB / WB)	55.0 / 52.6 °F
Coil Leaving Humidity Ratio	55.53 gr/lb
Coil Sensible Load	9.88 MBh
Coil Total Load	11.30 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	421.04 cfm
Resulting Room Relative Humidity	44.38 %

General Engineering Checks

Total Cooling Load	0.9 ton
Area / Load	164.26 ft²/ton
Total Floor Area	155 ft²
Cooling Airflow	2.72 cfm/ft²
Airflow / Load	446.97 cfm/ton
Percent Outdoor Air	3.6 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

Design Cooling Load Summary

By Trial
 CECIS GOMEZ PALACIOS
 DURANGO, GOMEZ PALACIOS

System - UP CECIS GOMEZ PALACIOS
Zone - GOMEZ PALACIOS SALA DE JUNTAS
Room - GOMEZ PALACIOS SALA DE JUNTAS

Coil Location - Room

Coil Peak Calculation Time: June, hour 17
 Ambient DB/WB/HR: 91 / 79 / 135

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	1,464		1,464	3.3%
Glass Transmission	454		454	1.0%
Wall Transmission	6,198		6,198	13.8%
Roof Transmission	4,952		4,952	11.0%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	0		0	0.0%
Net Ceiling Load	0		0	0.0%
Lighting	2,974		2,974	6.6%
People	4,677	4,100	8,777	19.6%
Misc. Equipment Loads	12,266	0	12,266	27.4%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	32,984	4,100	37,084	82.7%
Ventilation Load	1,739	5,135	6,875	15.3%
Exhaust Heat	0	0	0	0.0%
Supply Fan Load	878		878	2.0%
Return Fan Load	0		0	0.0%
Net Duct Heat Pickup	0		0	0.0%
Wall Load to Plenum	0		0	0.0%
Roof Load to Plenum	0		0	0.0%
Adj Floor to Plenum	0		0	0.0%
Lighting Load to Plenum	0		0	0.0%
Misc. Equip. Load to Plenum	0	0	0	0.0%
Glass Transmission to Plenum	0		0	0.0%
Glass Solar to Plenum	0		0	0.0%
Over/Under Sizing	0		0	0.0%
Reheat at Design	0	0	0	0.0%
Underfloor Sup Heat Pickup	0		0	0.0%
Supply Air Leakage	0	0	0	0.0%
Total Cooling Loads	35,602	9,235	44,837	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	76.6 / 63.3 °F
Coil Entering Humidity Ratio	66.25 gr/lb
Coil Leaving Air (DB / WB)	55.0 / 53.1 °F
Coil Leaving Humidity Ratio	57.39 gr/lb
Coil Sensible Load	35.60 MBh
Coil Total Load	44.84 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	1,482.15 cfm
Resulting Room Relative Humidity	47.14 %

General Engineering Checks

Total Cooling Load	3.7 ton
Area / Load	128.42 ft²/ton
Total Floor Area	480 ft²
Cooling Airflow	3.09 cfm/ft²
Airflow / Load	396.67 cfm/ton
Percent Outdoor Air	6.7 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

Design Cooling Load Summary

By Trial
 CECIS GOMEZ PALACIOS
 DURANGO, GOMEZ PALACIOS

System - UP CECIS GOMEZ PALACIOS

Zone - GOMEZ PALACIOS VESTIBULO

Room - GOMEZ PALACIOS VESTIBULO

Coil Location - Room

Coil Peak Calculation Time: October, hour 14
 Ambient DB/WB/HR: 92 / 80 / 136

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	18,709		18,709	11.6%
Glass Transmission	2,505		2,505	1.5%
Wall Transmission	15,964		15,964	9.9%
Roof Transmission	31,556		31,556	19.5%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	4,262		4,262	2.6%
Net Ceiling Load	0		0	0.0%
Lighting	24,546		24,546	15.2%
People	9,154	8,200	17,354	10.7%
Misc. Equipment Loads	22,467	0	22,467	13.9%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	129,163	8,200	137,363	84.9%
Ventilation Load	3,813	11,316	15,128	9.3%
Exhaust Heat	-219	0	-219	-0.1%
Supply Fan Load	3,439		3,439	2.1%
Return Fan Load	0		0	0.0%
Net Duct Heat Pickup	0		0	0.0%
Wall Load to Plenum	0		0	0.0%
Roof Load to Plenum	0		0	0.0%
Adj Floor to Plenum	0		0	0.0%
Lighting Load to Plenum	6,137		6,137	3.8%
Misc. Equip. Load to Plenum	0	0	0	0.0%
Glass Transmission to Plenum	0		0	0.0%
Glass Solar to Plenum	0		0	0.0%
Over/Under Sizing	0		0	0.0%
Reheat at Design	0	0	0	0.0%
Underfloor Sup Heat Pickup	0		0	0.0%
Supply Air Leakage	0	0	0	0.0%
Total Cooling Loads	142,333	19,516	161,848	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	77.0 / 62.2 °F
Coil Entering Humidity Ratio	60.36 gr/lb
Coil Leaving Air (DB / WB)	55.0 / 52.6 °F
Coil Leaving Humidity Ratio	55.51 gr/lb
Coil Sensible Load	142.33 MBh
Coil Total Load	161.85 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	5,803.94 cfm
Resulting Room Relative Humidity	44.32 %

General Engineering Checks

Total Cooling Load	13.5 ton
Area / Load	256.15 ft ² /ton
Total Floor Area	3,455 ft ²
Cooling Airflow	1.68 cfm/ft ²
Airflow / Load	430.32 cfm/ton
Percent Outdoor Air	3.6 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

Room Checksums

By Trial

GOMEZ PALACIOS COCINETA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 6 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61			SADB			Ra Plenum		
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Return	Ret/OA	Fn MtrTD	Fn BldTD	Fn Frict	
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	0.00						
Skylite Cond	0	0	0	0	0	0	0	0.00						
Roof Cond	2,015	0	2,015	10	2,015	12	-245	10.76						
Glass Solar	1,848	0	1,848	9	1,848	11	0	0.00						
Glass/Door Cond	325	0	325	2	325	2	-238	10.46						
Wall Cond	7,721	0	7,721	38	7,721	46	-1,485	65.28						
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	0.00						
Infiltration	0	0	0	0	0	0	0	0.00						
Sub Total ==>	11,910	0	11,910	58	11,910	71	-1,968	86.50						
Internal Loads				Internal Loads										
Lights	1,139	0	1,139	6	1,139	7	0	0.00						
People	2,543	0	2,543	12	1,313	8	0	0.00						
Misc	2,346	0	2,346	11	2,346	14	0	0.00						
Sub Total ==>	6,027	0	6,027	29	4,797	29	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	2,127	10	0	0	0	0.00						
Adj Air Trans Heat	0	0	0	0	0	0	0	0						
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	0	0	0	0	0	0	0	0.00						
Sup. Fan Heat	0	0	445	2	0	0	194	-8.51						
Ret. Fan Heat	0	0	0	0	0	0	-501	22.01						
Duct Heat Pkup	0	0	0	0	0	0	0	0.00						
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00						
Supply Air Leakage	0	0	0	0	0	0	0	0.00						
Grand Total ==>	17,937	0	20,509	100.00	16,707	100.00	-1,968	-2,275	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	751	751
Terminal	751	751
Main Fan	751	751
Sec Fan	0	0
Nom Vent	30	0
AHU Vent	30	0
Infil	0	0
MinStop/Rh	0	0
Return	751	751
Exhaust	30	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	4.0	0.0
cfm/ft²	3.52	3.52
cfm/ton	439.25	
ft²/ton	124.76	
Btu/hr-ft²	96.19	0.00
No. People	6.0	28.1/1000 ft²

COOLING COIL SELECTION										
	Total Capacity		Sens Cap. MBh	Coil Airflow cfm	Enter DB/WB/HR			Leave DB/WB/HR		
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb
Main Clg	1.7	20.5	17.7	751	76.2	62.1	61.3	55.0	52.7	55.8
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	1.7	20.5								

AREAS			
	Gross Total	Glass ft²	(%)
Floor	213		
Part	0		
Int Door	0		
ExFlr	0		
Roof	213	0	0
Wall	371	25	7
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	0.0	751	69.6	72.4
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	0.0			

Room Checksums

By Trial

GOMEZ PALACIOS OFICINA 1

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 6 / 17		Mo/Hr: 6 / 17		Mo/Hr: Heating Design		Mo/Hr: Heating Design				Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61		OADB: 61				SADB	55.0	71.8
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	75.0	70.0
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	0.1	0.0
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Skylite Solar	0	0.00	Fn BldTD	0.1	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Skylite Cond	0	0.00	Fn Frict	0.4	0.0
Roof Cond	1,596	0	1,596	16	19	Roof Cond	-178	19.81	Roof Cond	-178	19.81	AIRFLOWS		
Glass Solar	487	0	487	5	6	Glass Solar	0	0.00	Glass Solar	0	0.00	Diffuser	375	375
Glass/Door Cond	151	0	151	1	2	Glass/Door Cond	-101	11.25	Glass/Door Cond	-101	11.25	Terminal	375	375
Wall Cond	2,065	0	2,065	20	25	Wall Cond	-464	51.81	Wall Cond	-464	51.81	Main Fan	375	375
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00	Partition/Door	0	0.00	Sec Fan	0	0
Floor	0	0	0	0	0	Floor	0	0.00	Floor	0	0.00	Nom Vent	15	0
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00	Adjacent Floor	0	0.00	AHU Vent	15	0
Infiltration	0	0	0	0	0	Infiltration	0	0.00	Infiltration	0	0.00	Infil	0	0
Sub Total ==>	4,299	0	4,299	42	52	Sub Total ==>	-743	82.87	Sub Total ==>	-743	82.87	MinStop/Rh	0	0
Internal Loads				Internal Loads				Internal Loads				Return	375	375
Lights	958	0	958	9	11	Lights	0	0.00	Lights	0	0.00	Exhaust	15	0
People	1,316	0	1,316	13	8	People	0	0.00	People	0	0.00	Rm Exh	0	0
Misc	2,384	0	2,384	23	29	Misc	0	0.00	Misc	0	0.00	Auxiliary	0	0
Sub Total ==>	4,658	0	4,658	45	48	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	0	1,064	10	0	Ventilation Load	0	0.00	Ventilation Load	0	0.00	ENGINEERING CKS		
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0	Adj Air Trans Heat	0	0	% OA	4.0	0.0
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	0	0.00	Ov/Undr Sizing	0	0.00	cfm/ft²	2.42	2.42
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00	Exhaust Heat	0	0.00	cfm/ton	439.16	
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	97	-10.80	OA Preheat Diff.	97	-10.80	ft²/ton	181.29	
Sup. Fan Heat	0	0	222	2	2	RA Preheat Diff.	-250	27.93	RA Preheat Diff.	-250	27.93	Btu/hr-ft²	66.19	0.00
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00	Additional Reheat	0	0.00	No. People	3.0	19.4/1000 ft²
Duct Heat Pkup	0	0	0	0	0	System Plenum Heat	0	0.00	System Plenum Heat	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 ==>	8,956	0	10,242	100.00	8,341	Grand Total ==>	-743	100.00	Grand Total ==>	-743	100.00			

COOLING COIL SELECTION											AREAS				HEATING COIL SELECTION						
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	ft² (%)	Capacity	Coil Airflow	Ent	Lvg				
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F								°F	gr/lb	MBh	cfm
Main Clg	0.9	10.2	8.8	375	76.2	62.1	61.3	55.0	52.7	55.8	Floor	155					Main Htg	0.0	375	69.6	71.8
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					Humidif	0.0	0	0.0	0.0
Total	0.9	10.2									Roof	155	0	0			Opt Vent	0.0	0	0.0	0.0
											Wall	119	11	9			Total	0.0			
											Ext Door	0	0	0							

Room Checksums

By Trial

GOMEZ PALACIOS OFICINA 2

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 6 / 17		Mo/Hr: 6 / 17		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61			SADB			Ra Plenum		
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Return	Ret/OA	Fn MtrTD	Fn BldTD	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Space Sens	Tot Sens		75.0	75.6	0.1	0.1	0.4	
						Btu/h	Btu/h	(%)	75.0	70.0	0.0	0.0	0.0	
Envelope Loads				Envelope Loads										
Skylite Solar	0	0	0	0	0	0	0	0.00						
Skylite Cond	0	0	0	0	0	0	0	0.00						
Roof Cond	1,578	0	1,578	14	1,578	17	-178	11.35						
Glass Solar	487	0	487	4	487	5	0	0.00						
Glass/Door Cond	150	0	150	1	150	2	-101	6.45						
Wall Cond	2,064	0	2,064	18	2,064	22	-464	29.68						
Partition/Door	1,092	0	1,092	10	1,092	12	-668	42.71						
Floor	0	0	0	0	0	0	0	0.00						
Adjacent Floor	0	0	0	0	0	0	0	0.00						
Infiltration	0	0	0	0	0	0	0	0.00						
Sub Total ==>	5,371	0	5,371	48	5,371	57	-1,411	90.19						
Internal Loads				Internal Loads										
Lights	939	0	939	8	939	10	0	0.00						
People	1,310	0	1,310	12	695	7	0	0.00						
Misc	2,366	0	2,366	21	2,366	25	0	0.00						
Sub Total ==>	4,614	0	4,614	41	3,999	43	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	1,069	9	0	0	0	0.00						
Adj Air Trans Heat	0	0	0	0	0	0	0	0						
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	0	0	0	0	0	0	97	-6.19						
Sup. Fan Heat	0	0	250	2	0	0	-250	16.00						
Ret. Fan Heat	0	0	0	0	0	0	0	0.00						
Duct Heat Pkup	0	0	0	0	0	0	0	0.00						
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00						
Supply Air Leakage	0	0	0	0	0	0	0	0.00						
Grand Total ==>	9,985	0	11,304	100.00	9,370	100.00	-1,411	-1,565	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	421	421
Terminal	421	421
Main Fan	421	421
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	421	421
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	3.6	0.0
cfm/ft²	2.72	2.72
cfm/ton	446.97	
ft²/ton	164.26	
Btu/hr-ft²	73.06	0.00
No. People	3.0	19.4/1000 ft²

COOLING COIL SELECTION										
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR		
	ton	MBh	MBh	cfm	°F	°F	gr/lb	°F	°F	gr/lb
Main Clg	0.9	11.3	9.9	421	76.1	61.9	60.4	55.0	52.6	55.5
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	0.9	11.3								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	155		
Part	187		
Int Door	0		
ExFlr	0		
Roof	155	0	0
Wall	119	11	9
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	0.0	421	69.7	73.0
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	0.0			

Room Checksums

By Trial

GOMEZ PALACIOS SALA DE JUNTAS

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 6 / 17		Mo/Hr: 6 / 17		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61			SADB			Ra Plenum		
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Return	Ret/OA	Fn MtrTD	Fn BldTD	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h							
Envelope Loads				Envelope Loads							AIRFLOWS			
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser	1,482	1,482			
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal	1,482	1,482			
Roof Cond	4,952	0	4,952	11	4,952	15	Roof Cond	-551	16.83	Main Fan	1,482	1,482		
Glass Solar	1,464	0	1,464	3	1,464	4	Glass Solar	0	0.00	Sec Fan	0	0		
Glass/Door Cond	454	0	454	1	454	1	Glass/Door Cond	-303	9.27	Nom Vent	100	0		
Wall Cond	6,198	0	6,198	14	6,198	19	Wall Cond	-1,394	42.61	AHU Vent	100	0		
Partition/Door	0	0	0	0	0	0	Partition/Door	0	0.00	Infil	0	0		
Floor	0	0	0	0	0	0	Floor	0	0.00	MinStop/Rh	0	0		
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0.00	Return	1,482	1,482		
Infiltration	0	0	0	0	0	0	Infiltration	0	0.00	Exhaust	100	0		
Sub Total ==>	13,068	0	13,068	29	13,068	40	Sub Total ==>	-2,248	68.71	Rm Exh	0	0		
Internal Loads				Internal Loads							ENGINEERING CKS			
Lights	2,974	0	2,974	7	2,974	9	Lights	0	0.00	% OA	6.7	0.0		
People	8,777	0	8,777	20	4,677	14	People	0	0.00	cfm/ft²	3.09	3.09		
Misc	12,266	0	12,266	27	12,266	37	Misc	0	0.00	cfm/ton	396.67			
Sub Total ==>	24,016	0	24,016	54	19,916	60	Sub Total ==>	0	0.00	ft²/ton	128.42			
Ceiling Load				Ceiling Load							Btu/hr-ft²			
Ventilation Load	0	0	6,875	15	0	0	Ventilation Load	0	0.00		93.45	0.00		
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0					
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	0	0.00					
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0.00					
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	645	-19.73					
Sup. Fan Heat	0	0	878	2	0	0	RA Preheat Diff.	-1,669	51.02					
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0.00					
Duct Heat Pkup	0	0	0	0	0	0	System Plenum Heat	0	0.00					
Underflr Sup Ht Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00					
Supply Air Leakage	0	0	0	0	0	0	Supply Air Leakage	0	0.00					
Grand Total ==>	37,084	0	44,837	100.00	32,984	100.00	Grand Total ==>	-2,248	-3,271	100.00	No. People	20.0	41.7/1000 ft²	

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION					
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Lvg	Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	3.7	44.8	35.6	1,482	76.6	63.3	66.3	55.0	53.1	57.4	Floor	480		Main Htg	0.0	1,482	69.4	71.4
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	3.7	44.8									Roof	480	0	Humidif	0.0	0	0.0	0.0
											Wall	357	32	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	0.0			

Room Checksums

By Trial

GOMEZ PALACIOS VESTIBULO

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES		
Peaked at Time:		Mo/Hr: 10 / 14		Mo/Hr: 10 / 14		Mo/Hr: Heating Design			Cooling	Heating			
Outside Air:		OADB/WB/HR: 92 / 80 / 136		OADB: 92		OADB: 61			SADB	55.0	71.7		
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Return	75.0	70.0		
Btu/h	Btu/h	Btu/h		Btu/h		Space Sens	Tot Sens		Ret/OA	76.5	70.0		
Envelope Loads				Envelope Loads				AIRFLOWS					
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser	5,804	5,804		
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal	5,804	5,804		
Roof Cond	31,556	0	19	31,556	24	Roof Cond	-3,965	29.78	Main Fan	5,804	5,804		
Glass Solar	18,709	0	12	18,709	14	Glass Solar	0	0.00	Sec Fan	0	0		
Glass/Door Cond	2,505	0	2	2,505	2	Glass/Door Cond	-1,722	12.93	Nom Vent	207	0		
Wall Cond	15,964	0	10	15,964	12	Wall Cond	-2,333	17.53	AHU Vent	207	0		
Partition/Door	4,262	0	3	4,262	3	Partition/Door	-3,170	23.81	Infil	0	0		
Floor	0	0	0	0	0	Floor	0	0.00	MinStop/Rh	0	0		
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00	Return	5,804	5,804		
Infiltration	0	0	0	0	0	Infiltration	0	0.00	Exhaust	207	0		
Sub Total ==>	72,996	0	45	72,996	57	Sub Total ==>	-11,189	84.06	Rm Exh	0	0		
Internal Loads				Internal Loads				ENGINEERING CKS					
Lights	24,546	6,137	19	24,546	19	Lights	0	0.00	% OA	3.6	0.0		
People	17,354	0	11	9,154	7	People	0	0.00	cfm/ft²	1.68	1.68		
Misc	22,467	0	14	22,467	17	Misc	0	0.00	cfm/ton	430.32			
Sub Total ==>	64,367	6,137	44	56,167	43	Sub Total ==>	0	0.00	ft²/ton	256.15			
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00	Btu/hr-ft²	46.85	0.00		
Ventilation Load	0	0	9	0	0	Ventilation Load	0	0.00	No. People	40.0	11.6/1000 ft²		
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0					
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	0	0.00					
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00					
Exhaust Heat	0	-219	0	0	0	OA Preheat Diff.	1,338	-10.05					
Sup. Fan Heat	0	3,439	2	0	0	RA Preheat Diff.	-3,460	25.99					
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00					
Duct Heat Pkup	0	0	0	0	0	System Plenum Heat	0	0.00					
Underflr Sup Ht Pkup	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00					
Supply Air Leakage	0	0	0	0	0	Supply Air Leakage	0	0.00					
Grand Total ==>	137,363	5,917	100.00	129,163	100.00	Grand Total ==>	-11,189	100.00					

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		ft² (%)	MBh	cfm	°F	°F	
Main Clg	13.5	161.9	5,804	77.0	62.2	60.4	55.0	52.6	55.5	Floor	3,455	0.0	5,804	69.7	71.7	
Aux Clg	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	888	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	0	0	0.0	0.0	
										ExFlr	0	0	0	0.0	0.0	
Total	13.5	161.9								Roof	3,455	0	0	0.0	0.0	
										Wall	726	181	25	0.0	0.0	
										Ext Door	0	0	0	0.0	0.0	

Zone Checksums

By Trial

GOMEZ PALACIOS COCINETA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 6 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 91		OADB: 61		OADB: 61		SADB	55.0	72.4
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	75.0	70.0
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	0.1	0.0
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Skylite Solar	0	0.00	Fn BldTD	0.1	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Skylite Cond	0	0.00	Fn Frict	0.4	0.0
Roof Cond	2,015	0	2,015	10	2,015	12	-245	10.76	Roof Cond	-245	10.76	AIRFLOWS		
Glass Solar	1,848	0	1,848	9	1,848	11	0	0.00	Glass Solar	0	0.00	Diffuser	751	751
Glass/Door Cond	325	0	325	2	325	2	-238	10.46	Glass/Door Cond	-238	10.46	Terminal	751	751
Wall Cond	7,721	0	7,721	38	7,721	46	-1,485	65.28	Wall Cond	-1,485	65.28	Main Fan	751	751
Partition/Door	0	0	0	0	0	0	0	0.00	Partition/Door	0	0.00	Sec Fan	0	0
Floor	0	0	0	0	0	0	0	0.00	Floor	0	0.00	Nom Vent	30	0
Adjacent Floor	0	0	0	0	0	0	0	0.00	Adjacent Floor	0	0.00	AHU Vent	30	0
Infiltration	0	0	0	0	0	0	0	0.00	Infiltration	0	0.00	Infil	0	0
Sub Total ==>	11,910	0	11,910	58	11,910	71	-1,968	86.50	Sub Total ==>	-1,968	86.50	MinStop/Rh	0	0
Internal Loads				Internal Loads				Internal Loads				Return	751	751
Lights	1,139	0	1,139	6	1,139	7	0	0.00	Lights	0	0.00	Exhaust	30	0
People	2,543	0	2,543	12	1,313	8	0	0.00	People	0	0.00	Rm Exh	0	0
Misc	2,346	0	2,346	11	2,346	14	0	0.00	Misc	0	0.00	Auxiliary	0	0
Sub Total ==>	6,027	0	6,027	29	4,797	29	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	0	2,127	10	0	0	0	0.00	Ventilation Load	0	0.00	ENGINEERING CKS		
Adj Air Trans Heat	0	0	0	0	0	0	0	0	Adj Air Trans Heat	0	0	% OA	4.0	0.0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0.00	Ov/Undr Sizing	0	0.00	cfm/ft²	3.52	3.52
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00	Exhaust Heat	0	0.00	cfm/ton	439.25	
Exhaust Heat	0	0	0	0	0	0	194	-8.51	OA Preheat Diff.	194	-8.51	ft²/ton	124.76	
Sup. Fan Heat	0	445	2	0	0	0	-501	22.01	RA Preheat Diff.	-501	22.01	Btu/hr-ft²	96.19	0.00
Ret. Fan Heat	0	0	0	0	0	0	0	0.00	Additional Reheat	0	0.00	No. People	6	
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	System Plenum Heat	0	0.00			
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	Underflr Sup Ht Pkup	0	0.00			
Supply Air Leakage	0	0	0	0	0	0	0	0.00	Supply Air Leakage	0	0.00			
Grand Total ==>	17,937	0	20,509	100.00	16,707	100.00	-1,968	100.00	Grand Total ==>	-1,968	-2,275			

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION					
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Lvg	Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	1.7	20.5	17.7	751	76.2	62.1	61.3	55.0	52.7	55.8	Floor	213		Main Htg	0.0	751	69.6	72.4
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	1.7	20.5									Roof	213	0	Humidif	0.0	0	0.0	0.0
											Wall	371	25	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	0.0			

Zone Checksums

By Trial

GOMEZ PALACIOS OFICINA 1

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 6 / 17		Mo/Hr: 6 / 17		Mo/Hr: Heating Design		Mo/Hr: Heating Design				Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61		OADB: 61				SADB	55.0	71.8
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	75.0	70.0
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								Ret/OA	75.6	70.0
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	0	0	0.00	Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	0	0	0.00	Fn BldTD	0.1	0.0
Roof Cond	1,596	0	1,596	16	19	Roof Cond	-178	19.81	-178	-178	51.81	Fn Frict	0.4	0.0
Glass Solar	487	0	487	5	6	Glass Solar	0	0.00	0	0	0.00			
Glass/Door Cond	151	0	151	1	2	Glass/Door Cond	-101	11.25	-101	-101	11.25			
Wall Cond	2,065	0	2,065	20	25	Wall Cond	-464	51.81	-464	-464	51.81			
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00	0	0	0.00			
Floor	0	0	0	0	0	Floor	0	0.00	0	0	0.00			
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00	0	0	0.00			
Infiltration	0	0	0	0	0	Infiltration	0	0.00	0	0	0.00			
<i>Sub Total ==></i>	4,299	0	4,299	42	52	<i>Sub Total ==></i>	-743	82.87	-743	-743	82.87			
Internal Loads				Internal Loads								AIRFLOWS		
Lights	958	0	958	9	11	Lights	0	0.00	0	0	0.00	Cooling	Heating	
People	1,316	0	1,316	13	8	People	0	0.00	0	0	0.00	Diffuser	375	375
Misc	2,384	0	2,384	23	29	Misc	0	0.00	0	0	0.00	Terminal	375	375
<i>Sub Total ==></i>	4,658	0	4,658	45	48	<i>Sub Total ==></i>	0	0.00	0	0	0.00	Main Fan	375	375
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00	0	0	0.00	Sec Fan	0	0
Ventilation Load	0	0	1,064	10	0	Ventilation Load	0	0.00	0	0	0.00	Nom Vent	15	0
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0	0	0	0	AHU Vent	15	0
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	0	0.00	0	0	0.00	Infil	0	0
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00	0	0	0.00	MinStop/Rh	0	0
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	97	-10.80	97	97	-10.80	Return	375	375
Sup. Fan Heat	0	0	222	2	2	RA Preheat Diff.	-250	27.93	-250	-250	27.93	Exhaust	15	0
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00	0	0	0.00	Rm Exh	0	0
Duct Heat Pkup	0	0	0	0	0	System Plenum Heat	0	0.00	0	0	0.00	Auxiliary	0	0
Underflr Sup Ht Pkup	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00	0	0	0.00	Leakage Dwn	0	0
Supply Air Leakage	0	0	0	0	0	Supply Air Leakage	0	0.00	0	0	0.00	Leakage Ups	0	0
Grand Total ==>	8,956	0	10,242	100.00	8,341	Grand Total ==>	-743	100.00	-743	-896	100.00	ENGINEERING CKS		
												% OA	4.0	0.0
												cfm/ft²	2.42	2.42
												cfm/ton	439.16	
												ft²/ton	181.29	
												Btu/hr-ft²	66.19	0.00
												No. People	3	

COOLING COIL SELECTION											AREAS			HEATING COIL SELECTION				
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Lvg	Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb								ft²
Main Clg	0.9	10.2	8.8	375	76.2	62.1	61.3	55.0	52.7	55.8	Floor	155		0.0	375	69.6	71.8	
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	
Total	0.9	10.2									ExFlr	0		0.0	0	0.0	0.0	
											Roof	155	0	0	0.0	0	0.0	0.0
											Wall	119	11	9	0.0	0	0.0	0.0
											Ext Door	0	0	0	0.0	0	0.0	0.0
											Total			0.0				

Zone Checksums

By Trial

GOMEZ PALACIOS OFICINA 2

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 6 / 17		Mo/Hr: 6 / 17		Mo/Hr: Heating Design		Mo/Hr: Heating Design				Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61		OADB: 61				SADB	55.0	73.0
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	75.0	70.0
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								Ret/OA	75.6	70.0
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00				Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00				Fn BldTD	0.1	0.0
Roof Cond	1,578	0	1,578	14	1,578	Roof Cond	-178	11.35				Fn Frict	0.4	0.0
Glass Solar	487	0	487	4	487	Glass Solar	0	0.00				AIRFLOWS		
Glass/Door Cond	150	0	150	1	150	Glass/Door Cond	-101	6.45				Diffuser	421	421
Wall Cond	2,064	0	2,064	18	2,064	Wall Cond	-464	29.68				Terminal	421	421
Partition/Door	1,092	0	1,092	10	1,092	Partition/Door	-668	42.71				Main Fan	421	421
Floor	0	0	0	0	0	Floor	0	0.00				Sec Fan	0	0
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00				Nom Vent	15	0
Infiltration	0	0	0	0	0	Infiltration	0	0.00				AHU Vent	15	0
Sub Total ==>	5,371	0	5,371	48	5,371	Sub Total ==>	-1,411	90.19				Infil	0	0
Internal Loads				Internal Loads								MinStop/Rh	0	0
Lights	939	0	939	8	939	Lights	0	0.00				Return	421	421
People	1,310	0	1,310	12	695	People	0	0.00				Exhaust	15	0
Misc	2,366	0	2,366	21	2,366	Misc	0	0.00				Rm Exh	0	0
Sub Total ==>	4,614	0	4,614	41	3,999	Sub Total ==>	0	0.00				Auxiliary	0	0
Ceiling Load				Ceiling Load								Leakage Dwn	0	0
Ventilation Load	0	0	1,069	9	0	Ventilation Load	0	0.00				Leakage Ups	0	0
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0				ENGINEERING CKS		
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	0	0.00				% OA	3.6	0.0
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00				cfm/ft²	2.72	2.72
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	97	-6.19				cfm/ton	446.97	
Sup. Fan Heat	0	0	250	2	0	RA Preheat Diff.	-250	16.00				ft²/ton	164.26	
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00				Btu/hr-ft²	73.06	0.00
Duct Heat Pkup	0	0	0	0	0	System Plenum Heat	0	0.00				No. People	3	
Underflr Sup Ht Pkup	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00						
Supply Air Leakage	0	0	0	0	0	Supply Air Leakage	0	0.00						
Grand Total ==>	9,985	0	11,304	100.00	9,370	Grand Total ==>	-1,411	100.00						

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION						
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	ft² (%)	Capacity	Coil Airflow	Ent	Lvg		
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb								MBh	cfm
Main Clg	0.9	11.3	9.9	421	76.1	61.9	60.4	55.0	52.6	55.5	Floor	155			Main Htg	0.0	421	69.7	73.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	187			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	0.9	11.3									Roof	155	0	0	Humidif	0.0	0	0.0	0.0
											Wall	119	11	9	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	0	Total	0.0			

Zone Checksums

By Trial

GOMEZ PALACIOS SALA DE JUNTAS

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 6 / 17		Mo/Hr: 6 / 17		Mo/Hr: Heating Design			Cooling		Heating	SADB	55.0	71.4
Outside Air:		OADB/WB/HR: 91 / 79 / 135		OADB: 91		OADB: 61			Ra Plenum		75.0	75.0	70.0	
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Ret/OA	Fn MtrTD	Fn BldTD	Fn Frict		
Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Btu/h	Tot Sens Btu/h	(%)	76.1	0.1	0.1	0.4		
Envelope Loads				Envelope Loads							AIRFLOWS			
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser	1,482	1,482	1,482		
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal	1,482	1,482	1,482		
Roof Cond	4,952	0	4,952	11	4,952	15	Roof Cond	-551	16.83	Main Fan	1,482	1,482		
Glass Solar	1,464	0	1,464	3	1,464	4	Glass Solar	0	0.00	Sec Fan	0	0		
Glass/Door Cond	454	0	454	1	454	1	Glass/Door Cond	-303	9.27	Nom Vent	100	0		
Wall Cond	6,198	0	6,198	14	6,198	19	Wall Cond	-1,394	42.61	AHU Vent	100	0		
Partition/Door	0	0	0	0	0	0	Partition/Door	0	0.00	Infil	0	0		
Floor	0	0	0	0	0	0	Floor	0	0.00	MinStop/Rh	0	0		
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0.00	Return	1,482	1,482		
Infiltration	0	0	0	0	0	0	Infiltration	0	0.00	Exhaust	100	0		
Sub Total ==>	13,068	0	13,068	29	13,068	40	Sub Total ==>	-2,248	68.71	Rm Exh	0	0		
Internal Loads				Internal Loads							ENGINEERING CKS			
Lights	2,974	0	2,974	7	2,974	9	Lights	0	0.00	% OA	6.7	0.0		
People	8,777	0	8,777	20	4,677	14	People	0	0.00	cfm/ft²	3.09	3.09		
Misc	12,266	0	12,266	27	12,266	37	Misc	0	0.00	cfm/ton	396.67			
Sub Total ==>	24,016	0	24,016	54	19,916	60	Sub Total ==>	0	0.00	ft²/ton	128.42			
Ceiling Load				Ceiling Load							Btu/hr-ft²			
Ventilation Load	0	0	6,875	15	0	0	Ventilation Load	0	0.00	No. People	93.45	0.00		
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0					
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	0	0.00					
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0.00					
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	645	-19.73					
Sup. Fan Heat	0	0	878	2	0	0	RA Preheat Diff.	-1,669	51.02					
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0.00					
Duct Heat Pkup	0	0	0	0	0	0	System Plenum Heat	0	0.00					
Underflr Sup Ht Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00					
Supply Air Leakage	0	0	0	0	0	0	Supply Air Leakage	0	0.00					
Grand Total ==>	37,084	0	44,837	100.00	32,984	100.00	Grand Total ==>	-2,248	-3,271	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 (%)	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb						
Main Clg	3.7	44.8	35.6	1,482	76.6	63.3	66.3	55.0	53.1	57.4	Floor	480	0.0	1,482	69.4	71.4
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	3.7	44.8									Roof	480	0	0	0.0	0.0
											Wall	357	32	9	0.0	0.0
											Ext Door	0	0	0	0.0	0.0
											Total	0.0				

Zone Checksums

By Trial

GOMEZ PALACIOS VESTIBULO

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES		
Peaked at Time:		Mo/Hr: 10 / 14		Mo/Hr: 10 / 14		Mo/Hr: Heating Design			Cooling	Heating			
Outside Air:		OADB/WB/HR: 92 / 80 / 136		OADB: 92		OADB: 61			SADB	55.0	71.7		
Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total (%)	Space Sensible	Percent Of Total (%)	Space Peak	Coil Peak	Percent Of Total	Ra Plenum	75.0	70.0		
Btu/h	Btu/h	Btu/h		Btu/h		Space Sens	Tot Sens		Ret/OA	76.5	70.0		
Envelope Loads				Envelope Loads							AIRFLOWS		
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser	5,804	5,804		
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal	5,804	5,804		
Roof Cond	31,556	0	31,556	19	31,556	24	-3,965	29.78	Main Fan	5,804	5,804		
Glass Solar	18,709	0	18,709	12	18,709	14	0	0.00	Sec Fan	0	0		
Glass/Door Cond	2,505	0	2,505	2	2,505	2	-1,722	12.93	Nom Vent	207	0		
Wall Cond	15,964	0	15,964	10	15,964	12	-2,333	17.53	AHU Vent	207	0		
Partition/Door	4,262	0	4,262	3	4,262	3	-3,170	23.81	Infil	0	0		
Floor	0	0	0	0	0	0	0	0.00	MinStop/Rh	0	0		
Adjacent Floor	0	0	0	0	0	0	0	0.00	Return	5,804	5,804		
Infiltration	0	0	0	0	0	0	0	0.00	Exhaust	207	0		
Sub Total ==>	72,996	0	72,996	45	72,996	57	-11,189	84.06	Rm Exh	0	0		
Internal Loads				Internal Loads							ENGINEERING CKS		
Lights	24,546	6,137	30,683	19	24,546	19	0	0.00	% OA	3.6	0.0		
People	17,354	0	17,354	11	9,154	7	0	0.00	cfm/ft²	1.68	1.68		
Misc	22,467	0	22,467	14	22,467	17	0	0.00	cfm/ton	430.32			
Sub Total ==>	64,367	6,137	70,504	44	56,167	43	0	0.00	ft²/ton	256.15			
Ceiling Load	0	0	0	0	0	0	0	0.00	Btu/hr-ft²	46.85	0.00		
Ventilation Load	0	0	15,128	9	0	0	0	0.00	No. People	40			
Adj Air Trans Heat	0	0	0	0	0	0	0	0					
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	0	-219	-219	0	0	0	0	0.00					
Sup. Fan Heat	0	0	3,439	2	0	0	1,338	-10.05					
Ret. Fan Heat	0	0	0	0	0	0	-3,460	25.99					
Duct Heat Pkup	0	0	0	0	0	0	0	0.00					
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00					
Supply Air Leakage	0	0	0	0	0	0	0	0.00					
Grand Total ==>	137,363	5,917	161,848	100.00	129,163	100.00	-11,189	-13,311	100.00				

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		ft² (%)	MBh	cfm	°F	°F		
Main Clg	13.5	161.9	142.3	5,804	77.0	62.2	60.4	55.0	52.6	55.5	Floor	3,455	0.0	5,804	69.7	71.7
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	888	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	13.5	161.9									Roof	3,455	0	0	0.0	0.0
											Wall	726	181	25	0.0	0.0
											Ext Door	0	0	0	0.0	0.0