

CECIS UNIDAD COLIMA

Location	COLIMA, COLIMA
Building owner	INFONAVIT
Program user	ING MEZA
Company	INGENOR
Comments	
By	INGENOR MEXICO S.A. DE C.V.
Dataset name	Y:\MX-1161 INFONAVIT PROYECTOS EJECUTIVOS CESIS\PRODUCCIËN\Colima\AIRE ACONDICIONADO\CALCULOS\CECIS-COLIMA-01.trc
Calculation time	10:47 AM on 03/20/2018
TRACE® 700 version	6.3.3
Location	Colima, Mexico
Latitude	19.1 deg
Longitude	103.4 deg
Time Zone	6
Elevation	1,621 ft
Barometric pressure	28.4 in. Hg
Air density	0.0720 lb/cu ft
Air specific heat	0.2444 Btu/lb·°F
Density-specific heat product	1.0564 Btu/h·cfm·°F
Latent heat factor	4,650.1 Btu·min/h·cu ft
Enthalpy factor	4.3217 lb·min/hr·cu ft
Summer design dry bulb	92.8 °F
Summer design wet bulb	80.3 °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 INGENOR MEXICO S.A. DE C.V.

COLIMA CESI UGAR

Variable Temperature Constant Volume

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 15		Mo/Hr: Sum of		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: Peaks		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	(%)	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	0.00						
Skylite Cond	0	0	0	0	0	0	0	0.00						
Roof Cond	50,333	0	50,333	6	50,897	9	-13,705	9.36						
Glass Solar	117,045	0	117,045	15	121,693	21	0	0.00						
Glass/Door Cond	11,228	0	11,228	1	10,206	2	-9,273	6.33						
Wall Cond	52,157	0	52,157	7	52,553	9	-7,608	5.19						
Partition/Door	22,300	0	22,300	3	21,306	4	-18,789	12.83						
Floor	0	0	0	0	0	0	0	0.00						
Adjacent Floor	0	0	0	0	0	0	0	0						
Infiltration	0	0	0	0	0	0	0	0.00						
Sub Total ==>	253,063	0	253,063	32	256,655	43	-49,374	33.71						
Internal Loads				Internal Loads				Internal Loads						
Lights	86,070	0	86,070	11	85,737	14	0	0.00						
People	138,904	0	138,904	18	70,628	12	0	0.00						
Misc	179,917	0	179,917	23	179,255	30	0	0.00						
Sub Total ==>	404,890	0	404,890	52	335,620	57	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	95,007	12	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	-81,109	55.38						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	12,027	-8.21						
Sup. Fan Heat	0	0	33,226	4	0	0	-28,014	19.13						
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 ==>	657,953	0	786,187	100.00	592,275	100.00	-130,483	-146,470	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	28,034	28,034
Terminal	28,034	28,034
Main Fan	28,034	28,034
Sec Fan	0	0
Nom Vent	1,645	0
AHU Vent	1,645	0
Infil	0	0
MinStop/Rh	0	0
Return	28,034	28,034
Exhaust	1,645	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	5.9	0.0
cfm/ft²	1.94	1.94
cfm/ton	427.91	
ft²/ton	220.66	
Btu/hr-ft²	54.38	-13.24
No. People	329	

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	65.5	786.2	649.9	28,034	75.9	63.4	72.2	53.9	53.0	62.0
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	65.5	786.2								

AREAS			
	Gross Total	Glass ft²	(%)
Floor	14,456		
Part	9,606		
Int Door	0		
ExFlr	0		
Roof	11,942	0	0
Wall	5,534	1,596	29
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	-44.9	1,645	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-191.4			

Zone Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÖN

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 11 / 15		Mo/Hr: 12 / 15		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 78 / 131		OADB: 90		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	Skylite Solar	0	0.00						
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00						
Roof Cond	45,735	0	45,735	9	46,150	12	Roof Cond	-11,804	-11,804	10.75				
Glass Solar	42,702	0	42,702	8	43,027	11	Glass Solar	0	0	0.00				
Glass/Door Cond	4,739	0	4,739	1	4,712	1	Glass/Door Cond	-3,718	-3,718	3.39				
Wall Cond	46,843	0	46,843	9	47,357	12	Wall Cond	-6,836	-6,836	6.23				
Partition/Door	16,449	0	16,449	3	16,204	4	Partition/Door	-12,963	-12,963	11.81				
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
Sub Total ==>	156,469	0	156,469	30	157,449	40	Sub Total ==>	-35,322	-35,322	32.17				
Internal Loads				Internal Loads										
Lights	60,992	0	60,992	12	61,048	15	Lights	0	0	0.00				
People	89,027	0	89,027	17	46,259	12	People	0	0	0.00				
Misc	133,696	0	133,696	25	133,804	34	Misc	0	0	0.00				
Sub Total ==>	283,714	0	283,714	54	241,112	60	Sub Total ==>	0	0	0.00				
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0	0.00					
Ventilation Load	0	0	62,488	12	0	Ventilation Load	0	0	0.00					
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0	0					
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	-64,309	-64,309	58.58					
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00						
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	7,640	-6.96						
Sup. Fan Heat	0	0	22,359	4	0	RA Preheat Diff.	-17,796	16.21						
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 ==>	440,183	0	525,030	100.00	398,562	100.00	Grand Total ==>	-99,631	-109,787	100.00				

AIRFLOWS

	Cooling	Heating
Diffuser	18,865	18,865
Terminal	18,865	18,865
Main Fan	18,865	18,865
Sec Fan	0	0
Nom Vent	1,045	0
AHU Vent	1,045	0
Infil	0	0
MinStop/Rh	0	0
Return	18,865	18,865
Exhaust	1,045	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	5.5	0.0
cfm/ft²	1.83	1.83
cfm/ton	431.18	
ft²/ton	235.09	
Btu/hr-ft²	51.04	-13.45
No. People	209	

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	43.8	525.0	437.0	18,865	75.9	63.4	72.1	53.9	53.0	62.0
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	43.8	525.0								

AREAS

	Gross Total	Glass	
		ft²	(%)
Floor	10,286		
Part	6,627		
Int Door	0		
ExFlr	0		
Roof	10,286	0	0
Wall	4,178	640	15
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity MBh	Coil Airflow cfm	Ent	
			°F	Lvg °F
Main Htg	-109.8	18,865	69.5	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-28.6	1,045	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-138.3			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

CESI AVI PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 13		Mo/Hr: 12 / 12		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 88 / 77 / 127		OADB: 87		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		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	
Envelope Loads				Envelope Loads										
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00						
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00						
Roof Cond	3,263	0	3,263	2	3,448	Roof Cond	-1,423	5.01						
Glass Solar	73,249	0	73,249	36	77,391	Glass Solar	0	0.00						
Glass/Door Cond	6,304	0	6,304	3	5,324	Glass/Door Cond	-5,432	19.12						
Wall Cond	594	0	594	0	460	Wall Cond	-95	0.33						
Partition/Door	2,435	0	2,435	1	1,726	Partition/Door	-3,537	12.45						
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
Sub Total ==>	85,845	0	85,845	42	88,348	Sub Total ==>	-10,486	36.91						
Internal Loads				Internal Loads										
Lights	19,901	0	19,901	10	19,513	Lights	0	0.00						
People	41,186	0	41,186	20	19,777	People	0	0.00						
Misc	20,999	0	20,999	10	20,229	Misc	0	0.00						
Sub Total ==>	82,086	0	82,086	40	59,519	Sub Total ==>	0	0.00						
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00						
Ventilation Load	0	0	26,528	13	0	Ventilation Load	0	0.00						
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	-13,064	45.98						
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00						
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	3,656	-12.87						
Sup. Fan Heat	0	0	8,295	4	0	RA Preheat Diff.	-8,515	29.97						
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 ==>	167,932	0	202,755	100.00	147,866	Grand Total ==>	-23,550	28.409	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	6,999	6,999
Terminal	6,999	6,999
Main Fan	6,999	6,999
Sec Fan	0	0
Nom Vent	500	0
AHU Vent	500	0
Infil	0	0
MinStop/Rh	0	0
Return	6,999	6,999
Exhaust	500	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	7.1	0.0
cfm/ft²	2.12	2.12
cfm/ton	414.23	
ft²/ton	195.66	
Btu/hr-ft²	61.33	-12.73
No. People	100.0	30.2/1000 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	16.9	202.8	162.8	6,999	76.0	63.5	72.7	53.9	53.0	62.0
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	16.9	202.8								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	3,306		
Part	1,808		
Int Door	0		
ExFlr	0		
Roof	1,240	0	0
Wall	984	935	95
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-28.4	6,999	69.3	73.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-13.7	500	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-42.1			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

CESI CO PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 11 / 15		Mo/Hr: 11 / 15		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 78 / 131		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 <th>Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th></th>	Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th>	Fn BldTD <th>Fn Frict </th>	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Tot Sens Btu/h		75.0	76.4	0.1	0.3	0.8	
Envelope Loads				Envelope Loads										
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00						
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00						
Roof Cond	600	0	600	6	600	Roof Cond	-230	15.74						
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00						
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00						
Wall Cond	3,352	0	3,352	31	3,352	Wall Cond	-468	32.10						
Partition/Door	573	0	573	5	573	Partition/Door	-469	32.17						
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
Sub Total ==>	4,526	0	4,526	42	4,526	Sub Total ==>	-1,167	80.01						
Internal Loads				Internal Loads										
Lights	1,135	0	1,135	11	1,135	Lights	0	0.00						
People	2,578	0	2,578	24	1,348	People	0	0.00						
Misc	317	0	317	3	317	Misc	0	0.00						
Sub Total ==>	4,031	0	4,031	38	2,801	Sub Total ==>	0	0.00						
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00						
Ventilation Load	0	0	1,772	17	0	Ventilation Load	0	0.00						
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	0	0	0	0	OA Preheat Diff.	219	-15.04						
Sup. Fan Heat	0	0	411	4	0	RA Preheat Diff.	-511	35.03						
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 ==>	8,556	0	10,740	100.00	7,326	Grand Total ==>	-1,167	100.00						

AIRFLOWS		
	Cooling	Heating
Diffuser	347	347
Terminal	347	347
Main Fan	347	347
Sec Fan	0	0
Nom Vent	30	0
AHU Vent	30	0
Infil	0	0
MinStop/Rh	0	0
Return	347	347
Exhaust	30	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	8.7	0.0
cfm/ft²	1.73	1.73
cfm/ton	387.47	
ft²/ton	223.47	
Btu/hr-ft²	53.70	-11.39
No. People	6.0	30.0/1000 ft²

COOLING COIL SELECTION									
	Total Capacity	Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR		
	ton	MBh	cfm	°F	°F	gr/lb	°F	°F	gr/lb
Main Clg	0.9	10.7	347	76.4	63.9	74.0	53.9	53.0	62.0
Aux Clg	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
Total	0.9	10.7							

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	200		
Part	240		
Int Door	0		
ExFlr	0		
Roof	200	0	0
Wall	242	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-1.5	347	69.2	73.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.8	30	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-2.3			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

CESI IDF PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 8 / 17		Mo/Hr: 8 / 17		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 79 / 138		OADB: 91		OADB: 91		OADB: 61		OADB: 61		SADB	55.0	73.2
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	0	0	0.00	0	0	0.00	Fn BldTD	0.3	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn Frict	0.8	0.0
Roof Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	AIRFLOWS		
Glass Solar	0	0	0	0	0	0	0	0.00	0	0	0.00	Diffuser	Cooling	Heating
Glass/Door Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Terminal	550	550
Wall Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Main Fan	550	550
Partition/Door	958	958	8	958	8	958	-589	31.83	-589	-589	31.83	Sec Fan	0	0
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00	Nom Vent	0	0
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00	AHU Vent	0	0
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00	Infil	0	0
Sub Total ==>	958	958	8	958	8	958	-589	31.83	-589	-589	31.83	MinStop/Rh	0	0
Internal Loads				Internal Loads				Internal Loads				Return	550	550
Lights	840	840	7	840	7	840	0	0.00	0	0	0.00	Exhaust	0	0
People	0	0	0	0	0	0	0	0.00	0	0	0.00	Rm Exh	0	0
Misc	9,829	9,829	80	9,829	85	9,829	0	0.00	0	0	0.00	Auxiliary	0	0
Sub Total ==>	10,669	10,669	87	10,669	92	10,669	0	0.00	0	0	0.00	Leakage Dwn	0	0
Ceiling Load				Ceiling Load				Ceiling Load				Leakage Ups	0	0
Ventilation Load	0	0	0	0	0	0	0	0.00	0	0	0.00	ENGINEERING CKS		
Adj Air Trans Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	% OA	Cooling	Heating
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00	cfm/ft²	4.05	4.05
Ov/Undr Sizing	0	0	0	0	0	0	-1,262	68.17	-1,262	-1,262	68.17	cfm/ton	537.83	
Exhaust Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	ft²/ton	132.91	
Sup. Fan Heat	0	652	5	0	0	0	0	0.00	0	0	0.00	Btu/hr-ft²	90.29	-13.62
Ret. Fan Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	No. People	0.0	0.0/1000 ft²
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00			
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00			
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00			
Grand Total ==>	11,627	12,279	100.00	11,627	100.00	11,627	-1,852	100.00	-1,852	-1,852	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	Ent	Lvg				
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb					ft²	(%)	MBh	cfm
Main Clg	1.0	12.3	12.3	550	75.0	62.3	68.5	53.9	53.0	62.0	Floor	136		Main Htg	-1.9	550	70.0	73.2
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	301		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	12.3									Roof	0	0	Humidif	0.0	0	0.0	0.0
											Wall	0	0	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-1.9			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

CESI PR PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 8 / 17		Mo/Hr: 8 / 17		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 79 / 138		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 <th>Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th></th>	Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th>	Fn BldTD <th>Fn Frict </th>	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Tot Sens 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	0	0	0	0	0	0	0	0.00						
Glass Solar	0	0	0	0	0	0	0	0.00						
Glass/Door Cond	0	0	0	0	0	0	0	0.00						
Wall Cond	0	0	0	0	0	0	0	0.00						
Partition/Door	977		977	15	977	21	-601	67.80						
Floor	0		0	0	0	0	0	0.00						
Adjacent Floor	0		0	0	0	0	0	0.00						
Infiltration	0		0	0	0	0	0	0.00						
<i>Sub Total ==></i>	977		977	15	977	21	-601	67.80						
Internal Loads				Internal Loads										
Lights	849	0	849	13	849	18	0	0.00						
People	1,315	0	1,315	20	700	15	0	0.00						
Misc	2,128	0	2,128	33	2,128	46	0	0.00						
<i>Sub Total ==></i>	4,292	0	4,292	66	3,677	79	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	948	15	0	0	0	0.00						
Adj Air Trans Heat	0		0	0	0	0	0	0						
Dehumid. Ov Sizing			0	0			-140	15.76						
Ov/Undr Sizing	0		0	0	0	0	0	0.00						
Exhaust Heat		0	0	0			110	-12.36						
Sup. Fan Heat			261	4			-255	28.80						
Ret. Fan Heat		0	0	0			0	0.00						
Duct Heat Pkup		0	0	0			0	0.00						
Underflr Sup Ht Pkup			0	0			0	0.00						
Supply Air Leakage		0	0	0			0	0.00						
Grand Total ==>	5,270	0	6,479	100.00	4,655	100.00	-741	100.00						

AIRFLOWS		
	Cooling	Heating
Diffuser	220	220
Terminal	220	220
Main Fan	220	220
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	220	220
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	6.8	0.0
cfm/ft²	1.60	1.60
cfm/ton	408.05	
ft²/ton	254.67	
Btu/hr-ft²	47.12	-9.43
No. People	3.0	21.8/1000 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	0.5	6.5	5.2	220	76.1	63.7	73.2	53.9	53.0	62.0
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	0.5	6.5								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	138		
Part	308		
Int Door	0		
ExFlr	0		
Roof	0	0	0
Wall	0	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-0.9	220	69.4	73.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-1.3			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

CESI SJ PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 11 / 15		Mo/Hr: 12 / 15		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 78 / 131		OADB: 90		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 <th>Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th></th>	Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th>	Fn BldTD <th>Fn Frict </th>	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Tot Sens Btu/h		75.0	76.2	0.1	0.3	0.8	
Envelope Loads				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	391	0	391	2	356	2	-146	5.31						
Glass Solar	1,093	0	1,093	5	1,274	9	0	0.00						
Glass/Door Cond	185	0	185	1	171	1	-123	4.47						
Wall Cond	1,196	0	1,196	6	1,213	9	-164	5.95						
Partition/Door	341	0	341	2	301	2	-280	10.14						
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						
<i>Sub Total ==></i>	3,206	0	3,206	16	3,315	23	-713	25.87						
Internal Loads				Internal Loads				Internal Loads						
Lights	1,816	0	1,816	9	1,816	13	0	0.00						
People	4,361	0	4,361	22	2,311	16	0	0.00						
Misc	6,818	0	6,818	34	6,818	48	0	0.00						
<i>Sub Total ==></i>	12,995	0	12,995	65	10,945	77	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	2,954	15	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	-1,558	56.50						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	366	-13.26						
Sup. Fan Heat	0	0	800	4	0	0	-852	30.88						
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 ==>	16,201	0	19,955	100.00	14,260	100.00	-2,271	100.00						

AIRFLOWS		
	Cooling	Heating
Diffuser	675	675
Terminal	675	675
Main Fan	675	675
Sec Fan	0	0
Nom Vent	50	0
AHU Vent	50	0
Infil	0	0
MinStop/Rh	0	0
Return	675	675
Exhaust	50	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	7.4	0.0
cfm/ft²	2.23	2.23
cfm/ton	405.90	
ft²/ton	181.91	
Btu/hr-ft²	65.97	-13.63
No. People	10.0	33.1/1000 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	20.0	15.8	675	76.2	63.7	73.2	53.9	53.0	62.0
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	20.0								

AREAS			
	Gross Total	Glass ft²	(%)
Floor	303		
Part	143		
Int Door	0		
ExFlr	0		
Roof	128	0	0
Wall	106	21	20
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-2.8	675	69.3	73.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-1.4	50	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-4.1			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

CESI VI PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 8 / 17		Mo/Hr: 8 / 17		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Mo/Hr: Heating Design		Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 79 / 138		OADB: 91		OADB: 91		OADB: 61		OADB: 61		SADB	55.0	73.2
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	0.3	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Skylite Cond	0	0.00	Fn Frict	0.8	0.0
Roof Cond	344	0	344	4	344	Roof Cond	-101	7.68	Roof Cond	-101	7.68	AIRFLOWS		
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00	Glass Solar	0	0.00	Diffuser	378	378
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00	Glass/Door Cond	0	0.00	Terminal	378	378
Wall Cond	171	0	171	2	171	Wall Cond	-44	3.34	Wall Cond	-44	3.34	Main Fan	378	378
Partition/Door	566	0	566	6	566	Partition/Door	-349	26.48	Partition/Door	-349	26.48	Sec Fan	0	0
Floor	0	0	0	0	0	Floor	0	0.00	Floor	0	0.00	Nom Vent	5	0
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00	Adjacent Floor	0	0.00	AHU Vent	5	0
Infiltration	0	0	0	0	0	Infiltration	0	0.00	Infiltration	0	0.00	Infil	0	0
Sub Total ==>	1,081	0	1,081	12	1,081	Sub Total ==>	-495	37.50	Sub Total ==>	-495	37.50	MinStop/Rh	0	0
Internal Loads				Internal Loads				Internal Loads				Return	378	378
Lights	537	0	537	6	537	Lights	0	0.00	Lights	0	0.00	Exhaust	5	0
People	437	0	437	5	232	People	0	0.00	People	0	0.00	Rm Exh	0	0
Misc	6,130	0	6,130	69	6,130	Misc	0	0.00	Misc	0	0.00	Auxiliary	0	0
Sub Total ==>	7,103	0	7,103	79	6,898	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	316	4	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	1.3	0.0
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	-776	58.81	Ov/Undr Sizing	-776	58.81	cfm/ft²	4.27	4.27
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00	Exhaust Heat	0	0.00	cfm/ton	506.51	
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	37	-2.77	OA Preheat Diff.	37	-2.77	ft²/ton	118.48	
Sup. Fan Heat	0	448	448	5	0	RA Preheat Diff.	-85	6.45	RA Preheat Diff.	-85	6.45	Btu/hr-ft²	101.28	-16.48
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00	Additional Reheat	0	0.00	No. People	1.0	11.3/1000 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 ==>	8,184	0	8,948	100.00	7,979	Grand Total ==>	-1,271	100.00	Grand Total ==>	-1,319	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			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	0.8	9.0	8.5	378	75.2	62.6	69.4	53.9	53.0	62.0	Floor	88		Main Htg	-1.3	378	69.9	73.2
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	179		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	0.8	9.0									Roof	88	0	Humidif	-0.1	5	16.6	57.7
											Wall	23	0	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-1.5			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGAACIÖN PR3 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 13		Mo/Hr: 12 / 13		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 88 / 77 / 127		OADB: 88		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	75.5	0.1	0.3	0.8	
						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	Skylite Solar	0	0.00						
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00						
Roof Cond	494	0	494	5	494	Roof Cond	-217	9.52						
Glass Solar	2,981	0	2,981	29	2,981	Glass Solar	0	0.00						
Glass/Door Cond	260	0	260	2	260	Glass/Door Cond	-225	9.87						
Wall Cond	1,017	0	1,017	10	1,017	Wall Cond	-163	7.15						
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00						
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
<i>Sub Total ==></i>	4,753	0	4,753	46	4,753	<i>Sub Total ==></i>	-605	26.54						
Internal Loads				Internal Loads										
Lights	1,059	0	1,059	10	1,059	Lights	0	0.00						
People	1,285	0	1,285	12	670	People	0	0.00						
Misc	2,050	0	2,050	20	2,050	Misc	0	0.00						
<i>Sub Total ==></i>	4,394	0	4,394	42	3,779	<i>Sub Total ==></i>	0	0.00						
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00						
Ventilation Load	0	0	796	8	0	Ventilation Load	0	0.00						
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	-1,528	67.07						
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00						
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	110	-4.81						
Sup. Fan Heat	0	0	479	5	0	RA Preheat Diff.	-255	11.21						
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 ==>	9,147	0	10,421	100.00	8,532	Grand Total ==>	-2,133	100.00						

AIRFLOWS		
	Cooling	Heating
Diffuser	404	404
Terminal	404	404
Main Fan	404	404
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	404	404
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	3.7	0.0
cfm/ft²	2.14	2.14
cfm/ton	465.02	
ft²/ton	217.64	
Btu/hr-ft²	55.14	-14.22
No. People	3.0	15.9/1000 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	10.4	9.2	404	75.5	62.9	70.7	53.9	53.0	62.0
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	10.4								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	189		
Part	0		
Int Door	0		
ExFlr	0		
Roof	189	0	0
Wall	123	39	31
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-2.3	404	69.7	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-2.7			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN CC PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES		
Peaked at Time:		Mo/Hr: 12 / 13		Mo/Hr: 12 / 13		Mo/Hr: Heating Design			Cooling	Heating			
Outside Air:		OADB/WB/HR: 88 / 77 / 127		OADB: 88		OADB: 61			SADB	55.0	75.0		
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	75.0	70.0		
Envelope Loads				Envelope Loads				AIRFLOWS					
								Cooling			Heating		
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser	302	302		
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal	302	302		
Roof Cond	357	0	357	4	6	Roof Cond	-157	8.78	Main Fan	302	302		
Glass Solar	2,955	0	2,955	34	46	Glass Solar	0	0.00	Sec Fan	0	0		
Glass/Door Cond	260	0	260	3	4	Glass/Door Cond	-225	12.56	Nom Vent	20	0		
Wall Cond	942	0	942	11	15	Wall Cond	-151	8.44	AHU Vent	20	0		
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00	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	302	302		
Infiltration	0	0	0	0	0	Infiltration	0	0.00	Exhaust	20	0		
Sub Total ==>	4,515	0	4,515	52	71	Sub Total ==>	-533	29.78	Rm Exh	0	0		
Internal Loads				Internal Loads				ENGINEERING CKS					
Lights	762	0	762	9	12	Lights	0	0.00	% OA	6.6	0.0		
People	1,710	0	1,710	20	14	People	0	0.00	cfm/ft²	2.21	2.21		
Misc	215	0	215	2	3	Misc	0	0.00	cfm/ton	420.49			
Sub Total ==>	2,688	0	2,688	31	29	Sub Total ==>	0	0.00	ft²/ton	190.67			
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00	Btu/hr-ft²	62.94	-17.05		
Ventilation Load	0	0	1,061	12	0	Ventilation Load	0	0.00	No. People	4.0	29.2/1000 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	-1,063	59.36					
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00					
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	146	-8.17					
Sup. Fan Heat	0	0	358	4	4	RA Preheat Diff.	-341	19.03					
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 ==>	7,203	0	8,622	100.00	6,383	Grand Total ==>	-1,596	-1,790	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			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	0.7	8.6	7.0	302	75.9	63.4	72.4	53.9	53.0	62.0	Floor	137		Main Htg	-1.8	302	69.4	75.0
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	0.7	8.6									Roof	137	0	Humidif	-0.6	20	16.6	57.7
											Wall	117	39	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-2.3			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN CO PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES					
Peaked at Time:		Mo/Hr: 12 / 14		Mo/Hr: 12 / 14		Mo/Hr: Heating Design		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		OADB: 90		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	Space Sens	Tot Sens	Percent Of Total	Return	Ret/OA	Fn MtrTD	Fn BldTD	Fn Frict
Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	Btu/h	Btu/h	(%)	Btu/h	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	0.00	0	0	0.00	75.0	75.0	0.1	0.0	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	75.0	70.0	0.3	0.0	0.0
Roof Cond	1,974	0	1,974	5	1,974	7	-849	10.84	-849	-849	10.84	75.9	70.0	0.0	0.0	0.0
Glass Solar	7,762	0	7,762	21	7,762	28	0	0.00	0	0	0.00	0.1	0.0	0.0	0.0	0.0
Glass/Door Cond	871	0	871	2	871	3	-675	8.61	-675	-675	8.61	0.3	0.0	0.0	0.0	0.0
Wall Cond	8,317	0	8,317	22	8,317	29	-1,178	15.04	-1,178	-1,178	15.04	0.0	0.0	0.0	0.0	0.0
Partition/Door	323	0	323	1	323	1	-361	4.61	-361	-361	4.61	0.0	0.0	0.0	0.0	0.0
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00	0.0	0.0	0.0	0.0	0.0
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00	0.0	0.0	0.0	0.0	0.0
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00	0.0	0.0	0.0	0.0	0.0
Sub Total ==>	19,246	0	19,246	51	19,246	68	-3,062	39.11	-3,062	-3,062	39.11					
Internal Loads				Internal Loads				Internal Loads								
Lights	4,202	0	4,202	11	4,202	15	0	0.00	0	0	0.00					
People	6,875	0	6,875	18	3,595	13	0	0.00	0	0	0.00					
Misc	1,173	0	1,173	3	1,173	4	0	0.00	0	0	0.00					
Sub Total ==>	12,250	0	12,250	33	8,970	32	0	0.00	0	0	0.00					
Ceiling Load	0	0	0	0	0	0	0	0.00	0	0	0.00					
Ventilation Load	0	0	4,348	12	0	0	0	0.00	0	0	0.00					
Adj Air Trans Heat	0	0	0	0	0	0	0	0	0	0	0					
Dehumid. Ov Sizing	0	0	0	0	0	0	-3,991	50.96	-3,991	-3,991	50.96					
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00					
Exhaust Heat	0	0	0	0	0	0	585	-7.47	0	0	0.00					
Sup. Fan Heat	0	0	1,583	4	0	0	-1,362	17.40	0	0	0.00					
Ret. Fan Heat	0	0	0	0	0	0	0	0.00	0	0	0.00					
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00					
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00					
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00					
Grand Total ==>	31,496	0	37,427	100.00	28,216	100.00	-7,053	100.00	-7,831	-7,831	100.00					

AIRFLOWS

	Cooling	Heating
Diffuser	1,336	1,336
Terminal	1,336	1,336
Main Fan	1,336	1,336
Sec Fan	0	0
Nom Vent	80	0
AHU Vent	80	0
Infil	0	0
MinStop/Rh	0	0
Return	1,336	1,336
Exhaust	80	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	6.0	0.0
cfm/ft²	1.80	1.80
cfm/ton	428.21	
ft²/ton	237.26	
Btu/hr-ft²	50.58	-13.54
No. People	16.0	21.6/1000 ft²

COOLING COIL SELECTION

	Total Capacity	Sens Cap.	Coil Airflow	Enter DB/WB/HR		Leave DB/WB/HR		
	ton	MBh	cfm	°F	°F	°F	°F	gr/lb
Main Clg	3.1	37.4	31.0	75.9	63.3	72.0	53.9	53.0
Aux Clg	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
Total	3.1	37.4						

AREAS

	Gross Total	Glass	
		ft²	(%)
Floor	740		
Part	185		
Int Door	0		
ExFlr	0		
Roof	740	0	0
Wall	726	116	16
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-7.8	1,336	69.5	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-2.2	80	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-10.0			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN DE PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 14		Mo/Hr: 12 / 14		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		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	75.3	0.1	0.3	0.8	
						Btu/h	Btu/h		75.0	75.0	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	1,003	0	1,003	5	1,003	6	-434	10.45						
Glass Solar	5,013	0	5,013	27	5,013	31	0	0.00						
Glass/Door Cond	579	0	579	3	579	4	-450	10.83						
Wall Cond	5,730	0	5,730	31	5,730	36	-813	19.57						
Partition/Door	324	0	324	2	324	2	-361	8.69						
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						
<i>Sub Total ==></i>	12,650	0	12,650	69	12,650	79	-2,057	49.54						
Internal Loads				Internal Loads										
Lights	2,114	0	2,114	12	2,114	13	0	0.00						
People	1,285	0	1,285	7	670	4	0	0.00						
Misc	596	0	596	3	596	4	0	0.00						
<i>Sub Total ==></i>	3,995	0	3,995	22	3,380	21	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	815	4	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	-1,950	46.95						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	110	-2.64						
Sup. Fan Heat	0	0	899	5	0	0	-255	6.15						
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 ==>	16,645	0	18,359	100.00	16,030	100.00	-4,007	100.00						

AIRFLOWS		
	Cooling	Heating
Diffuser	759	759
Terminal	759	759
Main Fan	759	759
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	759	759
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	2.0	0.0
cfm/ft²	2.01	2.01
cfm/ton	495.93	
ft²/ton	247.07	
Btu/hr-ft²	48.57	-12.07
No. People	3.0	7.9/1000 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	1.5	18.4	17.2	759	75.3	62.7	69.7	53.9	53.0	62.0
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	1.5	18.4								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	378		
Part	185		
Int Door	0		
ExFlr	0		
Roof	378	0	0
Wall	498	77	16
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-4.2	759	69.8	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-4.6			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR1 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 14		Mo/Hr: 12 / 14		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		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 <th>Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th></th>	Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th>	Fn BldTD <th>Fn Frict </th>	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h		75.0	75.6	0.1	0.3	0.8	
Envelope Loads				Envelope Loads										
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00						
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00						
Roof Cond	367	0	367	4	367	Roof Cond	-158	7.30						
Glass Solar	2,538	0	2,538	25	2,538	Glass Solar	0	0.00						
Glass/Door Cond	290	0	290	3	290	Glass/Door Cond	-225	10.37						
Wall Cond	1,065	0	1,065	11	1,065	Wall Cond	-151	6.96						
Partition/Door	334	0	334	3	334	Partition/Door	-373	17.19						
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
Sub Total ==>	4,594	0	4,594	46	4,594	Sub Total ==>	-907	41.82						
Internal Loads				Internal Loads										
Lights	776	0	776	8	776	Lights	0	0.00						
People	1,286	0	1,286	13	671	People	0	0.00						
Misc	2,053	0	2,053	21	2,053	Misc	0	0.00						
Sub Total ==>	4,115	0	4,115	41	3,500	Sub Total ==>	0	0.00						
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00						
Ventilation Load	0	0	815	8	0	Ventilation Load	0	0.00						
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	-1,116	51.46						
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00						
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	110	-5.06						
Sup. Fan Heat	0	0	454	5	0	RA Preheat Diff.	-255	11.78						
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 ==>	8,709	0	9,979	100.00	8,094	Grand Total ==>	-2,023	-2,169	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	383	383
Terminal	383	383
Main Fan	383	383
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	383	383
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	3.9	0.0
cfm/ft²	2.78	2.78
cfm/ton	460.74	
ft²/ton	165.95	
Btu/hr-ft²	72.31	-18.69
No. People	3.0	21.7/1000 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	0.8	10.0	8.8	383	75.6	63.0	70.8	53.9	53.0	62.0
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	0.8	10.0								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	138		
Part	191		
Int Door	0		
ExFlr	0		
Roof	138	0	0
Wall	117	39	33
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-2.2	383	69.6	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-2.6			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR11 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 12 / 13		Mo/Hr: 12 / 13		Mo/Hr: Heating Design		Mo/Hr: Heating Design				Cooling	Heating	
Outside Air:		OADB/WB/HR: 88 / 77 / 127		OADB: 88		OADB: 88		OADB: 61				SADB	55.0	75.0
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				Envelope Loads				Fn MtrTD	0.1	0.0
Skylite Solar	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn BldTD	0.3	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn Frict	0.8	0.0
Roof Cond	360	0	360	4	360	5	-158	7.38	-158	-158	7.38	AIRFLOWS		
Glass Solar	2,955	0	2,955	30	2,955	37	0	0.00	0	0	0.00	Diffuser	379	379
Glass/Door Cond	260	0	260	3	260	3	-225	10.48	-225	-225	10.48	Terminal	379	379
Wall Cond	942	0	942	10	942	12	-151	7.04	-151	-151	7.04	Main Fan	379	379
Partition/Door	0	0	0	0	0	0	0	0.00	0	0	0.00	Sec Fan	0	0
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00	Nom Vent	15	0
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00	AHU Vent	15	0
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00	Infil	0	0
Sub Total ==>	4,517	0	4,517	46	4,517	56	-534	24.90	-534	-534	24.90	MinStop/Rh	0	0
Internal Loads				Internal Loads				Internal Loads				Return	379	379
Lights	768	0	768	8	768	10	0	0.00	0	0	0.00	Exhaust	15	0
People	1,283	0	1,283	13	668	8	0	0.00	0	0	0.00	Rm Exh	0	0
Misc	2,045	0	2,045	21	2,045	26	0	0.00	0	0	0.00	Auxiliary	0	0
Sub Total ==>	4,096	0	4,096	42	3,481	44	0	0.00	0	0	0.00	Leakage Dwn	0	0
Ceiling Load				Ceiling Load				Ceiling Load				Leakage Ups	0	0
Ventilation Load	0	0	796	8	0	0	0	0.00	0	0	0.00	ENGINEERING CKS		
Adj Air Trans Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	% OA	4.0	0.0
Dehumid. Ov Sizing	0	0	0	0	0	0	-1,465	68.30	-1,465	-1,465	68.30	cfm/ft²	2.74	2.74
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00	cfm/ton	460.85	
Exhaust Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	ft²/ton	168.00	
Sup. Fan Heat	0	449	449	5	0	0	110	-5.11	110	110	-5.11	Btu/hr-ft²	71.43	-18.51
Ret. Fan Heat	0	0	0	0	0	0	-255	11.91	-255	-255	11.91	No. People	3.0	21.7/1000 ft²
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00			
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00			
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00			
Grand Total ==>	8,613	0	9,857	100.00	7,998	100.00	-1,999		-2,145	-2,145	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			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	0.8	9.9	8.7	379	75.5	63.0	70.8	53.9	53.0	62.0	Floor	138		Main Htg	-2.2	379	69.6	75.0
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	0.8	9.9									Roof	138	0	Humidif	-0.4	15	16.6	57.7
											Wall	117	39	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-2.6			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR2 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 13		Mo/Hr: 12 / 13		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 88 / 77 / 127		OADB: 88		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 <th>Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th></th>	Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th>	Fn BldTD <th>Fn Frict </th>	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h		75.0	75.5	0.1	0.3	0.8	
Envelope Loads				Envelope Loads										
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00						
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00						
Roof Cond	360	0	360	4	360	Roof Cond	-158	7.38						
Glass Solar	2,955	0	2,955	30	2,955	Glass Solar	0	0.00						
Glass/Door Cond	260	0	260	3	260	Glass/Door Cond	-225	10.48						
Wall Cond	942	0	942	10	942	Wall Cond	-151	7.04						
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00						
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
Sub Total ==>	4,517	0	4,517	46	4,517	Sub Total ==>	-534	24.90						
Internal Loads				Internal Loads										
Lights	768	0	768	8	768	Lights	0	0.00						
People	1,283	0	1,283	13	668	People	0	0.00						
Misc	2,045	0	2,045	21	2,045	Misc	0	0.00						
Sub Total ==>	4,096	0	4,096	42	3,481	Sub Total ==>	0	0.00						
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00						
Ventilation Load	0	0	796	8	0	Ventilation Load	0	0.00						
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	-1,465	68.30						
Exhaust Heat	0	0	0	0	0	Exhaust Heat	0	0.00						
Sup. Fan Heat	0	0	449	5	0	OA Preheat Diff.	110	-5.11						
Ret. Fan Heat	0	0	0	0	0	RA Preheat Diff.	-255	11.91						
Duct Heat Pkup	0	0	0	0	0	Additional Reheat	0	0.00						
Underflr Sup Ht Pkup	0	0	0	0	0	System Plenum Heat	0	0.00						
Supply Air Leakage	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 ==>	8,613	0	9,857	100.00	7,998	Grand Total ==>	-1,999	2,145	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	379	379
Terminal	379	379
Main Fan	379	379
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	379	379
Exhaust	15	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	2.74	2.74
cfm/ton	460.85	
ft²/ton	168.00	
Btu/hr-ft²	71.43	-18.51
No. People	3.0	21.7/1000 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	0.8	9.9	8.7	379	75.5	63.0	70.8	53.9	53.0	62.0
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	0.8	9.9								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	138		
Part	0		
Int Door	0		
ExFlr	0		
Roof	138	0	0
Wall	117	39	33
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-2.2	379	69.6	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-2.6			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR4 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 15		Mo/Hr: 12 / 15		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		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	Tot Sens Btu/h		75.0	75.4	0.1	0.3	0.8	
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	514	0	514	4	514	4	-217	6.87						
Glass Solar	1,999	0	1,999	14	1,999	17	0	0.00						
Glass/Door Cond	306	0	306	2	306	3	-225	7.12						
Wall Cond	4,982	0	4,982	35	4,982	41	-686	21.71						
Partition/Door	523	0	523	4	523	4	-481	15.24						
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 ==>	8,324	0	8,324	59	8,324	69	-1,609	50.93						
Internal Loads				Internal Loads										
Lights	1,032	0	1,032	7	1,032	9	0	0.00						
People	1,278	0	1,278	9	663	6	0	0.00						
Misc	2,032	0	2,032	14	2,032	17	0	0.00						
Sub Total ==>	4,342	0	4,342	31	3,727	31	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	824	6	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	-1,404	44.45						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	110	-3.47						
Sup. Fan Heat	0	0	676	5	0	0	-255	8.09						
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 ==>	12,666	0	14,166	100.00	12,051	100.00	-3,013	-3,158	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	570	570
Terminal	570	570
Main Fan	570	570
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	570	570
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	2.6	0.0
cfm/ft²	3.02	3.02
cfm/ton	483.21	
ft²/ton	160.10	
Btu/hr-ft²	74.95	-18.88
No. People	3.0	15.9/1000 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	1.2	14.2	13.0	570	75.4	62.8	70.1	53.9	53.0	62.0
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	1.2	14.2								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	189		
Part	246		
Int Door	0		
ExFlr	0		
Roof	189	0	0
Wall	394	39	10
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-3.2	570	69.8	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-3.6			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR5 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 14		Mo/Hr: 12 / 14		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		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		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	0	0	0.00	0	0	
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	0	0	
Roof Cond	399	0	399	3	399	4	-173	6.20	-173	-173	0.1	0.0	0.0	
Glass Solar	3,831	0	3,831	30	3,831	36	0	0.00	0	0	0.3	0.0	0.0	
Glass/Door Cond	444	0	444	4	444	4	-345	12.37	-345	-345	0.8	0.0	0.0	
Wall Cond	2,157	0	2,157	17	2,157	20	-306	10.98	-306	-306				
Partition/Door	177	0	177	1	177	2	-197	7.08	-197	-197				
Floor	0	0	0	0	0	0	0	0.00	0	0				
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0				
Infiltration	0	0	0	0	0	0	0	0.00	0	0				
Sub Total ==>	7,008	0	7,008	56	7,008	66	-1,021	36.62	-1,021	-1,021				
Internal Loads				Internal Loads										
Lights	841	0	841	7	841	8	0	0.00	0	0				
People	1,284	0	1,284	10	669	6	0	0.00	0	0				
Misc	2,048	0	2,048	16	2,048	19	0	0.00	0	0				
Sub Total ==>	4,173	0	4,173	33	3,558	34	0	0.00	0	0				
Ceiling Load	0	0	0	0	0	0	0	0.00	0	0				
Ventilation Load	0	0	815	6	0	0	0	0.00	0	0				
Adj Air Trans Heat	0	0	0	0	0	0	0	0	0	0				
Dehumid. Ov Sizing	0	0	0	0	0	0	-1,621	58.15	-1,621	-1,621				
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00	0	0				
Exhaust Heat	0	0	0	0	0	0	110	-3.93	110	110				
Sup. Fan Heat	0	0	593	5	0	0	-255	9.17	-255	-255				
Ret. Fan Heat	0	0	0	0	0	0	0	0.00	0	0				
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0				
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0				
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0				
Grand Total ==>	11,182	0	12,590	100.00	10,567	100.00	-2,641	100.00	-2,787	-2,787				

AIRFLOWS		
	Cooling	Heating
Diffuser	500	500
Terminal	500	500
Main Fan	500	500
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	500	500
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	3.0	0.0
cfm/ft²	3.32	3.32
cfm/ton	476.73	
ft²/ton	143.45	
Btu/hr-ft²	83.65	-21.24
No. People	3.0	19.9/1000 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	1.1	12.6	11.4	500	75.4	62.8	70.3	53.9	53.0	62.0
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	1.1	12.6								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	151		
Part	101		
Int Door	0		
ExFlr	0		
Roof	151	0	0
Wall	218	59	27
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-2.8	500	69.7	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-3.2			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR6 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.0	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	0.3	0.0
Roof Cond	991	0	991	15	1,007	21	Roof Cond	-170	-170	12.66		Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00						
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00						
Wall Cond	0	0	0	0	0	Wall Cond	0	0.00						
Partition/Door	237	0	237	4	234	5	Partition/Door	-229	-229	16.98				
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
<i>Sub Total ==></i>	1,227	0	1,227	19	1,242	26	<i>Sub Total ==></i>	-399	-399	29.65				
Internal Loads				Internal Loads										
Lights	835	0	835	13	835	17	Lights	0	0	0.00				
People	1,286	0	1,286	19	671	14	People	0	0	0.00				
Misc	2,053	0	2,053	31	2,053	43	Misc	0	0	0.00				
<i>Sub Total ==></i>	4,174	0	4,174	63	3,559	74	<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	924	14	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	-801	-801	59.52				
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0	0.00				
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	110	-8.15					
Sup. Fan Heat	0	0	269	4	0	0	RA Preheat Diff.	-255	18.98					
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 ==>	5,401	0	6,595	100.00	4,800	100.00	Grand Total ==>	-1,200	-1,346	100.00				

AIRFLOWS		
	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	227	227
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	6.6	0.0
cfm/ft²	1.53	1.53
cfm/ton	413.46	
ft²/ton	270.22	
Btu/hr-ft²	44.41	-11.82
No. People	3.0	20.2/1000 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	0.6	6.6	5.3	227	76.0	63.6	73.0	53.9	53.0	62.0
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	0.6	6.6								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	149		
Part	117		
Int Door	0		
ExFlr	0		
Roof	149	0	0
Wall	0	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-1.4	227	69.4	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-1.8			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN PR9 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.0	70.0
Skylite Solar	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn BldTD	0.3	0.0
Roof Cond	991	0	991	15	1,007	21	-170	12.66	-170	-170	12.66	Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	0	0	0.00	0	0	0.00			
Glass/Door Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Wall Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Partition/Door	237	0	237	4	234	5	-229	16.98	-229	-229	16.98			
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00			
<i>Sub Total ==></i>	1,227	0	1,227	19	1,242	26	-399	29.65	-399	-399	29.65			
Internal Loads				Internal Loads								AIRFLOWS		
Lights	835	0	835	13	835	17	0	0.00	0	0	0.00	Cooling	Heating	
People	1,286	0	1,286	19	671	14	0	0.00	0	0	0.00	Diffuser	227	227
Misc	2,053	0	2,053	31	2,053	43	0	0.00	0	0	0.00	Terminal	227	227
<i>Sub Total ==></i>	4,174	0	4,174	63	3,559	74	0	0.00	0	0	0.00	Main Fan	227	227
Ceiling Load	0	0	0	0	0	0	0	0.00	0	0	0.00	Sec Fan	0	0
Ventilation Load	0	0	924	14	0	0	0	0.00	0	0	0.00	Nom Vent	15	0
Adj Air Trans Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	AHU Vent	15	0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00	Infil	0	0
Ov/Undr Sizing	0	0	0	0	0	0	-801	59.52	-801	-801	59.52	MinStop/Rh	0	0
Exhaust Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	Return	227	227
Sup. Fan Heat	0	0	269	4	0	0	0	-8.15	0	0	-8.15	Exhaust	15	0
Ret. Fan Heat	0	0	0	0	0	0	0	18.98	0	0	18.98	Rm Exh	0	0
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Auxiliary	0	0
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Dwn	0	0
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Ups	0	0
<i>Grand Total ==></i>	5,401	0	6,595	100.00	4,800	100.00	-1,200	100.00	-1,200	-1,346	100.00	ENGINEERING CKS		

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION						
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Ent	Lvg					
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F					°F	gr/lb	ft²	(%)	MBh
Main Clg	0.6	6.6	5.3	227	76.0	63.6	73.0	53.9	53.0	62.0	Floor	149		Main Htg	-1.4	227	69.4	75.0	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	117		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	
Total	0.6	6.6									ExFlr	0		Humidif	-0.4	15	16.6	57.7	
											Roof	149	0	0	Opt Vent	0.0	0	0.0	0.0
											Wall	0	0	0	Total	-1.8			
											Ext Door	0	0	0					

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN SJ1 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 14		Mo/Hr: 12 / 14		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		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 <th>Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th></th>	Ret/OA <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict </th></th>	Fn BldTD <th>Fn Frict </th>	Fn Frict	
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Tot Sens Btu/h		75.0	75.8	0.1	0.3	0.8	
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	774	0	774	3	774	4	-333	6.14						
Glass Solar	5,200	0	5,200	20	5,200	26	0	0.00						
Glass/Door Cond	581	0	581	2	581	3	-450	8.29						
Wall Cond	2,301	0	2,301	9	2,301	12	-326	6.01						
Partition/Door	323	0	323	1	323	2	-361	6.66						
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 ==>	9,179	0	9,179	36	9,179	46	-1,469	27.10						
Internal Loads				Internal Loads										
Lights	1,652	0	1,652	6	1,652	8	0	0.00						
People	4,300	0	4,300	17	2,250	11	0	0.00						
Misc	6,665	0	6,665	26	6,665	34	0	0.00						
Sub Total ==>	12,616	0	12,616	49	10,566	54	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	2,718	11	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	-3,467	63.94						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	366	-6.74						
Sup. Fan Heat	0	0	1,108	4	0	0	-852	15.71						
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 ==>	21,795	0	25,620	100.00	19,745	100.00	-4,936	-5,422	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	935	935
Terminal	935	935
Main Fan	935	935
Sec Fan	0	0
Nom Vent	50	0
AHU Vent	50	0
Infil	0	0
MinStop/Rh	0	0
Return	935	935
Exhaust	50	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	5.3	0.0
cfm/ft²	3.22	3.22
cfm/ton	437.74	
ft²/ton	135.83	
Btu/hr-ft²	88.35	-23.41
No. People	10.0	34.5/1000 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	2.1	25.6	21.6	935	75.8	63.2	71.7	53.9	53.0	62.0
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	2.1	25.6								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	290		
Part	185		
Int Door	0		
ExFlr	0		
Roof	290	0	0
Wall	246	77	31
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-5.4	935	69.5	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-1.4	50	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-6.8			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN SJ2 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 11 / 15		Mo/Hr: 12 / 15		Mo/Hr: Heating Design			Cooling		Heating	SADB	55.0	75.0
Outside Air:		OADB/WB/HR: 91 / 78 / 131		OADB: 90		OADB: 61			Ra Plenum		70.0	Return	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 <th>Fn MtrTD <th>Fn BldTD <th>Fn Frict <td colspan="1">76.0</td> <td colspan="1">70.0</td> </th></th></th>	Fn MtrTD <th>Fn BldTD <th>Fn Frict <td colspan="1">76.0</td> <td colspan="1">70.0</td> </th></th>	Fn BldTD <th>Fn Frict <td colspan="1">76.0</td> <td colspan="1">70.0</td> </th>	Fn Frict <td colspan="1">76.0</td> <td colspan="1">70.0</td>	76.0	70.0
Btu/h	Btu/h	Btu/h		Btu/h		Btu/h	Btu/h		0.1	0.0	0.0	0.0	0.3	0.0
Envelope Loads				Envelope Loads							AIRFLOWS			
Skylite Solar	0	0	0	0	0	0	0	0.00	Diffuser		940	940		
Skylite Cond	0	0	0	0	0	0	0	0.00	Terminal		940	940		
Roof Cond	1,180	0	1,180	4	1,075	5	-443	7.99	Main Fan		940	940		
Glass Solar	1,991	0	1,991	7	2,316	12	0	0.00	Sec Fan		0	0		
Glass/Door Cond	337	0	337	1	310	2	-225	4.05	Nom Vent		60	0		
Wall Cond	2,910	0	2,910	11	2,953	15	-401	7.22	AHU Vent		60	0		
Partition/Door	0	0	0	0	0	0	0	0.00	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		940	940		
Infiltration	0	0	0	0	0	0	0	0.00	Exhaust		60	0		
<i>Sub Total ==></i>	6,418	0	6,418	24	6,655	34	-1,068	19.26	Rm Exh		0	0		
Internal Loads				Internal Loads							ENGINEERING CKS			
Lights	2,302	0	2,302	9	2,302	12	0	0.00	% OA		6.4	0.0		
People	5,216	0	5,216	20	2,756	14	0	0.00	cfm/ft²		2.43	2.43		
Misc	8,140	0	8,140	30	8,140	41	0	0.00	cfm/ton		421.80			
<i>Sub Total ==></i>	15,659	0	15,659	59	13,199	66	0	0.00	ft²/ton		173.25			
Ceiling Load	0	0	0	0	0	0	0	0.00	Btu/hr-ft²		69.26	-18.61		
Ventilation Load	0	0	3,545	13	0	0	0	0.00	No. People		12.0	31.1/1000 ft²		
Adj Air Trans Heat	0	0	0	0	0	0	0	0						
Dehumid. Ov Sizing	0	0	0	0	0	0	-3,895	70.22						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	439	-7.91						
Sup. Fan Heat	0	0	1,114	4	0	0	-1,022	18.42						
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 ==>	22,077	0	26,735	100.00	19,854	100.00	-4,963	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	2.2	26.7	21.8	940	76.0	63.5	72.5	53.9	53.0	62.0	Floor	386		Main Htg	-5.6	940	69.4	75.0
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	2.2	26.7									Roof	386	0	Humidif	-1.6	60	16.6	57.7
											Wall	246	39	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-7.2			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN SJ3 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.6	70.0
Skylite Solar	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn BldTD	0.3	0.0
Roof Cond	991	0	991	16	1,007	25	-170	14.04	-170	-170	14.04	Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	0	0	0.00	0	0	0.00			
Glass/Door Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Wall Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Partition/Door	237	0	237	4	234	6	-229	18.84	-229	-229	18.84			
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00			
<i>Sub Total ==></i>	1,227	0	1,227	19	1,242	30	-399	32.88	-399	-399	32.88			
Internal Loads				Internal Loads								AIRFLOWS		
Lights	835	0	835	13	835	20	0	0.00	0	0	0.00	Cooling	Heating	
People	1,715	0	1,715	27	895	22	0	0.00	0	0	0.00	Diffuser	193	193
Misc	1,105	0	1,105	17	1,105	27	0	0.00	0	0	0.00	Terminal	193	193
<i>Sub Total ==></i>	3,655	0	3,655	58	2,835	70	0	0.00	0	0	0.00	Main Fan	193	193
												Sec Fan	0	0
Ceiling Load	0	0	0	0	0	0	0	0.00	0	0	0.00	Nom Vent	20	0
Ventilation Load	0	0	1,232	19	0	0	0	0.00	0	0	0.00	AHU Vent	20	0
Adj Air Trans Heat	0	0	0	0	0	0	0	0	0	0	0	Infil	0	0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00	MinStop/Rh	0	0
Ov/Undr Sizing	0	0	0	0	0	0	-620	51.10	-620	-620	51.10	Return	193	193
Exhaust Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	Exhaust	20	0
Sup. Fan Heat	0	0	229	4	0	0	0	-12.05	146	146	-12.05	Rm Exh	0	0
Ret. Fan Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	Auxiliary	0	0
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Dwn	0	0
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Ups	0	0
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00			
<i>Grand Total ==></i>	4,883	0	6,343	100.00	4,077	100.00	-1,019	100.00	-1,213	-1,213	100.00	ENGINEERING CKS		

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
Main Clg	0.5	6.3	4.6	193	76.6	64.3	75.5	53.9	53.0	62.0	Floor	149		Main Htg	-1.2	193	69.1	75.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	117		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	0.5	6.3									Roof	149	0	Humidif	-0.6	20	16.6	57.7
											Wall	0	0	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-1.8			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN SJ4 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.6	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	0.3	0.0
Roof Cond	991	0	991	16	1,007	25	Roof Cond	-170	-170	14.04		Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00						
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00						
Wall Cond	0	0	0	0	0	Wall Cond	0	0.00						
Partition/Door	237	0	237	4	234	6	Partition/Door	-229	-229	18.84				
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
<i>Sub Total ==></i>	1,227	0	1,227	19	1,242	30	<i>Sub Total ==></i>	-399	-399	32.88				
Internal Loads				Internal Loads										
Lights	835	0	835	13	835	20	Lights	0	0	0.00				
People	1,715	0	1,715	27	895	22	People	0	0	0.00				
Misc	1,105	0	1,105	17	1,105	27	Misc	0	0	0.00				
<i>Sub Total ==></i>	3,655	0	3,655	58	2,835	70	<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	1,232	19	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	-620	-620	51.10				
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0	0.00				
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	146	-12.05					
Sup. Fan Heat	0	0	229	4	0	0	RA Preheat Diff.	-341	28.07					
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 ==>	4,883	0	6,343	100.00	4,077	100.00	Grand Total ==>	-1,019	-1,213	100.00				

AIRFLOWS		
	Cooling	Heating
Diffuser	193	193
Terminal	193	193
Main Fan	193	193
Sec Fan	0	0
Nom Vent	20	0
AHU Vent	20	0
Infil	0	0
MinStop/Rh	0	0
Return	193	193
Exhaust	20	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	10.4	0.0
cfm/ft²	1.30	1.30
cfm/ton	365.04	
ft²/ton	280.92	
Btu/hr-ft²	42.72	-11.85
No. People	4.0	26.9/1000 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	0.5	6.3	4.6	193	76.6	64.3	75.5	53.9	53.0	62.0
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	0.5	6.3								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	149		
Part	117		
Int Door	0		
ExFlr	0		
Roof	149	0	0
Wall	0	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-1.2	193	69.1	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.6	20	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-1.8			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN SL PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 11 / 16		Mo/Hr: 11 / 16		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 131		OADB: 91		OADB: 61						SADB	55.0	75.0
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	75.8	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	0.3	0.0
Roof Cond	406	0	406	7	406	Roof Cond	-157	13.08				Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00				AIRFLOWS		
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00				Diffuser	209	209
Wall Cond	1,602	0	1,602	28	1,602	Wall Cond	-238	19.77				Terminal	209	209
Partition/Door	963	0	963	17	963	Partition/Door	-710	59.06				Main Fan	209	209
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	10	0
Infiltration	0	0	0	0	0	Infiltration	0	0.00				AHU Vent	10	0
<i>Sub Total ==></i>	2,971	0	2,971	52	2,971	<i>Sub Total ==></i>	-1,105	91.91				Infil	0	0
Internal Loads				Internal Loads								MinStop/Rh	0	0
Lights	780	0	780	14	780	Lights	0	0.00				Return	209	209
People	860	0	860	15	450	People	0	0.00				Exhaust	10	0
Misc	217	0	217	4	217	Misc	0	0.00				Rm Exh	0	0
<i>Sub Total ==></i>	1,857	0	1,857	33	1,447	<i>Sub Total ==></i>	0	0.00				Auxiliary	0	0
Ceiling Load				Ceiling Load								Leakage Dwn	0	0
Ventilation Load	0	0	585	10	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	4.8	0.0
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00				cfm/ft²	1.53	1.53
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	73	-6.08				cfm/ton	443.29	
Sup. Fan Heat	0	248	4	4	4	RA Preheat Diff.	-170	14.17				ft²/ton	290.36	
Ret. Fan Heat	0	0	0	0	0	Additional Reheat	0	0.00				Btu/hr-ft²	41.33	-10.77
Duct Heat Pkup	0	0	0	0	0	System Plenum Heat	0	0.00				No. People	2.0	14.6/1000 ft²
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						
<i>Grand Total ==></i>	4,829	0	5,662	100.00	4,419	<i>Grand Total ==></i>	-1,105	-1,202	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	MBh	cfm	°F	°F	gr/lb	°F	°F	gr/lb		ft² (%)	MBh	cfm	°F	°F
Main Clg	0.5	5.7	4.8	209	75.8	63.2	71.5	53.9	53.0	62.0	Floor	137	-1.2	209	69.6	75.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	363	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	0.5	5.7									Roof	137	-0.3	10	16.6	57.7
											Wall	123	0.0	0	0.0	0.0
											Ext Door	0	-1.5			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÓN UM PLANTA BAJA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES		
Peaked at Time:		Mo/Hr: 10 / 15		Mo/Hr: 12 / 16		Mo/Hr: Heating Design			Cooling	Heating			
Outside Air:		OADB/WB/HR: 92 / 79 / 136		OADB: 90		OADB: 61			SADB	55.0	75.0		
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	75.0	70.0		
Envelope Loads				Envelope Loads				AIRFLOWS					
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Diffuser	1,383	1,383		
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Terminal	1,383	1,383		
Roof Cond	1,291	0	1,291	3	1,052	Roof Cond	-440	5.02	Main Fan	1,383	1,383		
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00	Sec Fan	0	0		
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00	Nom Vent	150	0		
Wall Cond	6,670	0	6,670	15	7,175	Wall Cond	-1,022	11.66	AHU Vent	150	0		
Partition/Door	787	0	787	2	733	Partition/Door	-601	6.87	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	1,383	1,383		
Infiltration	0	0	0	0	0	Infiltration	0	0.00	Exhaust	150	0		
Sub Total ==>	8,748	0	8,748	19	8,960	Sub Total ==>	-2,063	23.54	Rm Exh	0	0		
Internal Loads				Internal Loads				ENGINEERING CKS					
Lights	2,174	0	2,174	5	2,230	Lights	0	0.00	% OA	10.8	0.0		
People	12,892	0	12,892	28	6,820	People	0	0.00	cfm/ft²	3.61	3.61		
Misc	11,098	0	11,098	24	11,207	Misc	0	0.00	cfm/ton	361.48			
Sub Total ==>	26,164	0	26,164	57	20,257	Sub Total ==>	0	0.00	ft²/ton	100.11			
Ceiling Load	0	0	0	0	0	Ceiling Load	0	0.00	Btu/hr-ft²	119.87	-33.58		
Ventilation Load	0	0	9,358	20	0	Ventilation Load	0	0.00	No. People	30.0	78.3/1000 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	-5,241	59.82					
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00					
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	1,097	-12.52					
Sup. Fan Heat	0	0	1,639	4	0	RA Preheat Diff.	-2,554	29.16					
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 ==>	34,912	0	45,910	100.00	29,217	Grand Total ==>	-7,304	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	Ent	Lvg				
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb					ft²	(%)	MBh	cfm
Main Clg	3.8	45.9	33.1	1,383	76.8	64.4	75.8	53.9	53.0	62.0	Floor	383		Main Htg	-8.8	1,383	69.0	75.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	308		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	3.8	45.9									Roof	383	0	Humidif	-4.1	150	16.6	57.7
											Wall	529	0	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-12.9			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION CE PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 16		Mo/Hr: 12 / 16		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		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	Tot Sens 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	391	0	391	3	391	3	-163	4.56						
Glass Solar	0	0	0	0	0	0	0	0.00						
Glass/Door Cond	0	0	0	0	0	0	0	0.00						
Wall Cond	3,011	0	3,011	20	3,011	21	-428	11.97						
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						
<i>Sub Total ==></i>	3,403	0	3,403	22	3,403	24	-591	16.53						
Internal Loads				Internal Loads										
Lights	834	0	834	5	834	6	0	0.00						
People	433	0	433	3	228	2	0	0.00						
Misc	9,636	0	9,636	63	9,636	68	0	0.00						
<i>Sub Total ==></i>	10,903	0	10,903	71	10,698	76	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	272	2	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	-2,934	82.11						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	37	-1.02						
Sup. Fan Heat	0	0	791	5	0	0	-85	2.38						
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						
<i>Grand Total ==></i>	14,305	0	15,368	100.00	14,100	100.00	-3,525	-3,573	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	667	667
Terminal	667	667
Main Fan	667	667
Sec Fan	0	0
Nom Vent	5	0
AHU Vent	5	0
Infil	0	0
MinStop/Rh	0	0
Return	667	667
Exhaust	5	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	0.7	0.0
cfm/ft²	4.70	4.70
cfm/ton	521.14	
ft²/ton	110.88	
Btu/hr-ft²	108.22	-26.13
No. People	1.0	7.0/1000 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	1.3	15.4	15.0	667	75.1	62.5	69.0	53.9	53.0	62.0
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	1.3	15.4								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	142		
Part	0		
Int Door	0		
ExFlr	0		
Roof	142	0	0
Wall	221	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-3.6	667	69.9	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.1	5	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-3.7			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION ET PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 8 / 17		Mo/Hr: 7 / 17		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 79 / 138		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	Tot Sens Btu/h		75.0	75.8	0.1	0.3	0.8	
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	12,172	0	12,172	9	12,613	13	-3,543	13.04						
Glass Solar	0	0	0	0	0	0	0	0.00						
Glass/Door Cond	0	0	0	0	0	0	0	0.00						
Wall Cond	436	0	436	0	385	0	-111	0.41						
Partition/Door	7,922	0	7,922	6	7,770	8	-4,860	17.88						
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 ==>	20,529	0	20,529	16	20,768	21	-8,513	31.33						
Internal Loads				Internal Loads										
Lights	19,469	0	19,469	15	19,469	19	0	0.00						
People	19,428	0	19,428	15	10,203	10	0	0.00						
Misc	49,519	0	49,519	38	49,519	50	0	0.00						
Sub Total ==>	88,415	0	88,415	69	79,190	79	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	14,226	11	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	-16,474	60.62						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	1,645	-6.05						
Sup. Fan Heat	0	0	5,608	4	0	0	-3,832	14.10						
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 ==>	108,945	0	128,778	100.00	99,959	100.00	-24,987	100.00						

AIRFLOWS		
	Cooling	Heating
Diffuser	4,731	4,731
Terminal	4,731	4,731
Main Fan	4,731	4,731
Sec Fan	0	0
Nom Vent	225	0
AHU Vent	225	0
Infil	0	0
MinStop/Rh	0	0
Return	4,731	4,731
Exhaust	225	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	4.8	0.0
cfm/ft²	1.53	1.53
cfm/ton	440.89	
ft²/ton	287.66	
Btu/hr-ft²	41.72	-10.79
No. People	45.0	14.6/1000 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	10.7	128.8	109.2	4,731	75.8	63.3	71.8	53.9	53.0	62.0
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	10.7	128.8								

AREAS			
	Gross Total	Glass ft²	(%)
Floor	3,087		
Part	2,485		
Int Door	0		
ExFlr	0		
Roof	3,087	0	0
Wall	57	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-27.2	4,731	69.6	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-6.2	225	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-33.3			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION IDF PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 12 / 16		Mo/Hr: 12 / 16		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		OADB: 61						SADB	55.0	75.0
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	75.1	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	0.3	0.0
Roof Cond	385	0	385	3	385	3	Roof Cond	-158	-158	4.88		Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00						
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00						
Wall Cond	1,607	0	1,607	11	1,607	13	Wall Cond	-226	-226	6.96				
Partition/Door	0	0	0	0	0	Partition/Door	0	0.00						
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
<i>Sub Total ==></i>	1,992	0	1,992	14	1,992	16	<i>Sub Total ==></i>	-384	-384	11.84				
Internal Loads				Internal Loads								AIRFLOWS		
Lights	832	0	832	6	832	7	Lights	0	0	0.00				
People	436	0	436	3	231	2	People	0	0	0.00				
Misc	9,733	0	9,733	70	9,733	76	Misc	0	0	0.00				
<i>Sub Total ==></i>	11,001	0	11,001	79	10,796	84	<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	272	2	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	-2,813	-2,813	86.67				
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0	0.00				
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	37	-1.13					
Sup. Fan Heat	0	0	717	5	0	0	RA Preheat Diff.	-85	2.62					
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 ==>	12,993	0	13,982	100.00	12,788	100.00	Grand Total ==>	-3,197	-3,245	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			MBh	cfm	°F	°F	gr/lb	°F								°F
Main Clg	1.2	14.0	13.6	605	75.1	62.5	69.0	53.9	53.0	62.0	Floor	138		Main Htg	-3.3	605	69.9	75.0
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	14.0									Roof	138	0	Humidif	-0.1	5	16.6	57.7
											Wall	117	0	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	Total	-3.4			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION PR10 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 12 / 14		Mo/Hr: 12 / 14		Mo/Hr: Heating Design			Cooling		Heating	SADB	55.0	75.0
Outside Air:		OADB/WB/HR: 90 / 77 / 127		OADB: 90		OADB: 61			Ra Plenum		70.0	Return	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	(%)	75.5	0.1	0.0	0.0		
Envelope Loads				Envelope Loads							AIRFLOWS			
Skylite Solar	0	0	0	0	0	Skylite Solar	0	0.00	Cooling		Heating			
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Diffuser	411	411			
Roof Cond	414	0	414	4	5	Roof Cond	-179	7.73	Terminal	411	411			
Glass Solar	2,523	0	2,523	24	29	Glass Solar	0	0.00	Main Fan	411	411			
Glass/Door Cond	290	0	290	3	3	Glass/Door Cond	-225	9.71	Sec Fan	0	0			
Wall Cond	1,542	0	1,542	15	18	Wall Cond	-219	9.44	Nom Vent	15	0			
Partition/Door	319	0	319	3	4	Partition/Door	-356	15.37	AHU Vent	15	0			
Floor	0	0	0	0	0	Floor	0	0.00	Infil	0	0			
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00	MinStop/Rh	0	0			
Infiltration	0	0	0	0	0	Infiltration	0	0.00	Return	411	411			
Sub Total ==>	5,088	0	5,088	48	59	Sub Total ==>	-979	42.24	Exhaust	15	0			
Internal Loads				Internal Loads							ENGINEERING CKS			
Lights	875	0	875	8	10	Lights	0	0.00	% OA	3.6	0.0			
People	1,285	0	1,285	12	8	People	0	0.00	cfm/ft²	2.64	2.64			
Misc	2,051	0	2,051	19	24	Misc	0	0.00	cfm/ton	465.27				
Sub Total ==>	4,211	0	4,211	40	41	Sub Total ==>	0	0.00	ft²/ton	176.57				
Ceiling Load				Ceiling Load							Btu/hr-ft²			
Ventilation Load	0	0	815	8	0	Ventilation Load	0	0.00		67.96	-17.48			
Adj Air Trans Heat	0	0	0	0	0	Adj Air Trans Heat	0	0	No. People		3.0	19.2/1000 ft²		
Dehumid. Ov Sizing	0	0	0	0	0	Ov/Undr Sizing	-1,192	51.46						
Ov/Undr Sizing	0	0	0	0	0	Exhaust Heat	0	0.00						
Exhaust Heat	0	0	0	0	0	OA Preheat Diff.	110	-4.73						
Sup. Fan Heat	0	487	5	0	0	RA Preheat Diff.	-255	11.03						
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 ==>	9,300	0	10,602	100.00	8,685	100.00	Grand Total ==>	-2,171	-2,317	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			MBh	cfm	°F	°F	gr/lb	°F								°F	gr/lb
Main Clg	0.9	10.6	9.4	411	75.5	62.9	70.7	53.9	53.0	62.0	Floor	156		Main Htg	-2.3	411	69.7	75.0	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	182		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	10.6									Roof	156	0	0	Humidif	-0.4	15	16.6	57.7
											Wall	152	39	25	Opt Vent	0.0	0	0.0	0.0
											Ext Door	0	0	0	Total	-2.7			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION PR7 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.0	70.0
Skylite Solar	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn BldTD	0.3	0.0
Roof Cond	991	0	991	15	1,007	21	-170	12.66	-170	-170	12.66	Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	0	0	0.00	0	0	0.00			
Glass/Door Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Wall Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Partition/Door	237	0	237	4	234	5	-229	16.98	-229	-229	16.98			
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00			
<i>Sub Total ==></i>	1,227	0	1,227	19	1,242	26	-399	29.65	-399	-399	29.65			
Internal Loads				Internal Loads								AIRFLOWS		
Lights	835	0	835	13	835	17	0	0.00	0	0	0.00	Cooling	Heating	
People	1,286	0	1,286	19	671	14	0	0.00	0	0	0.00	Diffuser	227	227
Misc	2,053	0	2,053	31	2,053	43	0	0.00	0	0	0.00	Terminal	227	227
<i>Sub Total ==></i>	4,174	0	4,174	63	3,559	74	0	0.00	0	0	0.00	Main Fan	227	227
Ceiling Load	0	0	0	0	0	0	0	0.00	0	0	0.00	Sec Fan	0	0
Ventilation Load	0	0	924	14	0	0	0	0.00	0	0	0.00	Nom Vent	15	0
Adj Air Trans Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	AHU Vent	15	0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00	Infil	0	0
Ov/Undr Sizing	0	0	0	0	0	0	-801	59.52	-801	-801	59.52	MinStop/Rh	0	0
Exhaust Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	Return	227	227
Sup. Fan Heat	0	0	269	4	0	0	0	-8.15	0	0	-8.15	Exhaust	15	0
Ret. Fan Heat	0	0	0	0	0	0	0	18.98	0	0	18.98	Rm Exh	0	0
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Auxiliary	0	0
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Dwn	0	0
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Ups	0	0
<i>Grand Total ==></i>	5,401	0	6,595	100.00	4,800	100.00	-1,200	100.00	-1,200	-1,346	100.00	ENGINEERING CKS		

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION						
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Ent	Lvg	Capacity	Coil Airflow	Ent	Lvg	
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F									°F
Main Clg	0.6	6.6	5.3	227	76.0	63.6	73.0	53.9	53.0	62.0	Floor	149		Main Htg	-1.4	227	69.4	75.0	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	117		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	
Total	0.6	6.6									ExFlr	0		Humidif	-0.4	15	16.6	57.7	
											Roof	149	0	0	Opt Vent	0.0	0	0.0	0.0
											Wall	0	0	0	Total	-1.8			
											Ext Door	0	0	0					

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION PR9 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.0	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	0.3	0.0
Roof Cond	991	0	991	15	1,007	21	Roof Cond	-170	-170	12.66		Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	Glass Solar	0	0.00						
Glass/Door Cond	0	0	0	0	0	Glass/Door Cond	0	0.00						
Wall Cond	0	0	0	0	0	Wall Cond	0	0.00						
Partition/Door	237	0	237	4	234	5	Partition/Door	-229	-229	16.98				
Floor	0	0	0	0	0	Floor	0	0.00						
Adjacent Floor	0	0	0	0	0	Adjacent Floor	0	0.00						
Infiltration	0	0	0	0	0	Infiltration	0	0.00						
<i>Sub Total ==></i>	1,227	0	1,227	19	1,242	26	<i>Sub Total ==></i>	-399	-399	29.65				
Internal Loads				Internal Loads										
Lights	835	0	835	13	835	17	Lights	0	0	0.00				
People	1,286	0	1,286	19	671	14	People	0	0	0.00				
Misc	2,053	0	2,053	31	2,053	43	Misc	0	0	0.00				
<i>Sub Total ==></i>	4,174	0	4,174	63	3,559	74	<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	924	14	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	-801	-801	59.52				
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0	0.00				
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	110	-8.15					
Sup. Fan Heat	0	0	269	4	0	0	RA Preheat Diff.	-255	18.98					
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 ==>	5,401	0	6,595	100.00	4,800	100.00	Grand Total ==>	-1,200	-1,346	100.00				

AIRFLOWS		
	Cooling	Heating
Diffuser	227	227
Terminal	227	227
Main Fan	227	227
Sec Fan	0	0
Nom Vent	15	0
AHU Vent	15	0
Infil	0	0
MinStop/Rh	0	0
Return	227	227
Exhaust	15	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	6.6	0.0
cfm/ft²	1.53	1.53
cfm/ton	413.46	
ft²/ton	270.22	
Btu/hr-ft²	44.41	-11.82
No. People	3.0	20.2/1000 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	0.6	6.6	5.3	227	76.0	63.6	73.0	53.9	53.0	62.0
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	0.6	6.6								

AREAS			
	Gross Total	Glass	
		ft²	(%)
Floor	149		
Part	117		
Int Door	0		
ExFlr	0		
Roof	149	0	0
Wall	0	0	0
Ext Door	0	0	0

HEATING COIL SELECTION				
	Capacity	Coil Airflow	Ent	Lvg
	MBh	cfm	°F	°F
Main Htg	-1.4	227	69.4	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-0.4	15	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-1.8			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION SE2 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 6 / 12		Mo/Hr: 6 / 12		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 89 / 78 / 135		OADB: 89		OADB: 61						SADB	55.0	75.0
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				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	0.3	0.0
Skylite Cond	0	0	0	0	0	Skylite Cond	0	0.00	Skylite Cond	0	0.00	Fn Frict	0.8	0.0
Roof Cond	3,626	0	3,626	27	3,626	38	Roof Cond	-551	20.39	Roof Cond	-551			
Glass Solar	0	0	0	0	0	0	Glass Solar	0	0.00	Glass Solar	0			
Glass/Door Cond	0	0	0	0	0	0	Glass/Door Cond	0	0.00	Glass/Door Cond	0			
Wall Cond	0	0	0	0	0	0	Wall Cond	0	0.00	Wall Cond	0			
Partition/Door	0	0	0	0	0	0	Partition/Door	0	0.00	Partition/Door	0			
Floor	0	0	0	0	0	0	Floor	0	0.00	Floor	0			
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0.00	Adjacent Floor	0			
Infiltration	0	0	0	0	0	0	Infiltration	0	0.00	Infiltration	0			
<i>Sub Total ==></i>	3,626	0	3,626	27	3,626	38	<i>Sub Total ==></i>	-551	20.39	<i>Sub Total ==></i>	-551			
Internal Loads				Internal Loads				Internal Loads				AIRFLOWS		
Lights	2,839	0	2,839	22	2,839	29	Lights	0	0.00	Lights	0	Cooling	Heating	
People	2,420	0	2,420	18	1,190	12	People	0	0.00	People	0	Diffuser	457	457
Misc	1,999	0	1,999	15	1,999	21	Misc	0	0.00	Misc	0	Terminal	457	457
<i>Sub Total ==></i>	7,258	0	7,258	55	6,028	62	<i>Sub Total ==></i>	0	0.00	<i>Sub Total ==></i>	0	Main Fan	457	457
Ceiling Load	0	0	0	0	0	0	Ceiling Load	0	0.00	Ceiling Load	0	Sec Fan	0	0
Ventilation Load	0	0	1,764	13	0	0	Ventilation Load	0	0.00	Ventilation Load	0	Nom Vent	30	0
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0	Adj Air Trans Heat	0	AHU Vent	30	0
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	-1,862	68.83	Ov/Undr Sizing	-1,862	Infil	0	0
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	0.00	Exhaust Heat	0	MinStop/Rh	0	0
Exhaust Heat	0	0	0	0	0	0	OA Preheat Diff.	219	-8.11	OA Preheat Diff.	219	Return	457	457
Sup. Fan Heat	0	542	4	0	0	0	RA Preheat Diff.	-511	18.89	RA Preheat Diff.	-511	Exhaust	30	0
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0.00	Additional Reheat	0	Rm Exh	0	0
Duct Heat Pkup	0	0	0	0	0	0	System Plenum Heat	0	0.00	System Plenum Heat	0	Auxiliary	0	0
Underflr Sup Ht Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0.00	Underflr Sup Ht Pkup	0	Leakage Dwn	0	0
Supply Air Leakage	0	0	0	0	0	0	Supply Air Leakage	0	0.00	Supply Air Leakage	0	Leakage Ups	0	0
Grand Total ==>	10,883	0	13,189	100.00	9,653	100.00	Grand Total ==>	-2,413	100.00	Grand Total ==>	-2,705	ENGINEERING CKS		

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	Lvq		
	ton	MBh			°F	°F	gr/lb	°F	°F	gr/lb								ft²	MBh
Main Clg	1.1	13.2	10.6	457	75.9	63.5	72.9	53.9	53.0	62.0	Floor	481		Main Htg	-2.7	457	69.4	75.0	
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	
Total	1.1	13.2									ExFlr	0		Humidif	-0.8	30	16.6	57.7	
											Roof	481	0	0	Opt Vent	0.0	0	0.0	0.0
											Wall	0	0	0	Total	-3.5			
											Ext Door	0	0	0					

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGACION SE-ET PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK			TEMPERATURES			
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design			Cooling			Heating		
Outside Air:		OADB/WB/HR: 91 / 78 / 136		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	Tot Sens 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	12,309	0	12,309	20	12,511	30	-2,119	17.34						
Glass Solar	0	0	0	0	0	0	0	0.00						
Glass/Door Cond	0	0	0	0	0	0	0	0.00						
Wall Cond	669	0	669	1	685	2	-119	0.97						
Partition/Door	2,790	0	2,790	4	2,765	7	-2,695	22.06						
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 ==>	15,768	0	15,768	25	15,961	38	-4,932	40.37						
Internal Loads				Internal Loads										
Lights	11,046	0	11,046	18	11,046	26	0	0.00						
People	14,330	0	14,330	23	7,155	17	0	0.00						
Misc	7,907	0	7,907	13	7,907	19	0	0.00						
Sub Total ==>	33,282	0	33,282	54	26,107	62	0	0.00						
Ceiling Load	0	0	0	0	0	0	0	0.00						
Ventilation Load	0	0	10,781	17	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	-5,584	45.71						
Ov/Undr Sizing	0	0	0	0	0	0	0	0.00						
Exhaust Heat	0	0	0	0	0	0	1,279	-10.47						
Sup. Fan Heat	0	0	2,360	4	0	0	-2,980	24.39						
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 ==>	49,050	0	62,191	100.00	42,068	100.00	-10,516	-12,217	100.00					

AIRFLOWS

	Cooling	Heating
Diffuser	1,991	1,991
Terminal	1,991	1,991
Main Fan	1,991	1,991
Sec Fan	0	0
Nom Vent	175	0
AHU Vent	175	0
Infil	0	0
MinStop/Rh	0	0
Return	1,991	1,991
Exhaust	175	0
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	8.8	0.0
cfm/ft²	1.08	1.08
cfm/ton	384.21	
ft²/ton	356.19	
Btu/hr-ft²	33.69	-9.21
No. People	35.0	19.0/1000 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	5.2	62.2	47.2	1,991	76.4	64.0	74.5	53.9	53.0	62.0
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	5.2	62.2								

AREAS

	Gross Total	Glass	
		ft²	(%)
Floor	1,846		
Part	1,378		
Int Door	0		
ExFlr	0		
Roof	1,846	0	0
Wall	62	0	0
Ext Door	0	0	0

HEATING COIL SELECTION

	Capacity MBh	Coil Airflow cfm	Ent Lvg	
			°F	°F
Main Htg	-12.2	1,991	69.2	75.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	-4.8	175	16.6	57.7
Opt Vent	0.0	0	0.0	0.0
Total	-17.0			

Room Checksums

By INGENOR MEXICO S.A. DE C.V.

DELEGCION PR8 PLANTA ALTA

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES		
Peaked at Time:		Mo/Hr: 7 / 13		Mo/Hr: 6 / 13		Mo/Hr: Heating Design						Cooling	Heating	
Outside Air:		OADB/WB/HR: 91 / 78 / 136		OADB: 91		OADB: 61						SADB	55.0	75.0
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	76.0	70.0
Skylite Solar	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn MtrTD	0.1	0.0
Skylite Cond	0	0	0	0	0	0	0	0.00	0	0	0.00	Fn BldTD	0.3	0.0
Roof Cond	1,014	0	1,014	15	1,031	21	-174	12.84	-174	-174	12.84	Fn Frict	0.8	0.0
Glass Solar	0	0	0	0	0	0	0	0.00	0	0	0.00			
Glass/Door Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Wall Cond	0	0	0	0	0	0	0	0.00	0	0	0.00			
Partition/Door	244	0	244	4	242	5	-236	17.36	-236	-236	17.36			
Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Adjacent Floor	0	0	0	0	0	0	0	0.00	0	0	0.00			
Infiltration	0	0	0	0	0	0	0	0.00	0	0	0.00			
<i>Sub Total ==></i>	1,258	0	1,258	19	1,273	26	-410	30.20	-410	-410	30.20			
Internal Loads				Internal Loads								AIRFLOWS		
Lights	855	0	855	13	855	18	0	0.00	0	0	0.00	Cooling	Heating	
People	1,286	0	1,286	19	671	14	0	0.00	0	0	0.00	Diffuser	230	230
Misc	2,053	0	2,053	31	2,053	42	0	0.00	0	0	0.00	Terminal	230	230
<i>Sub Total ==></i>	4,194	0	4,194	63	3,579	74	0	0.00	0	0	0.00	Main Fan	230	230
Ceiling Load	0	0	0	0	0	0	0	0.00	0	0	0.00	Sec Fan	0	0
Ventilation Load	0	0	924	14	0	0	0	0.00	0	0	0.00	Nom Vent	15	0
Adj Air Trans Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	AHU Vent	15	0
Dehumid. Ov Sizing	0	0	0	0	0	0	0	0.00	0	0	0.00	Infil	0	0
Ov/Undr Sizing	0	0	0	0	0	0	-802	59.07	-802	-802	59.07	MinStop/Rh	0	0
Exhaust Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	Return	230	230
Sup. Fan Heat	0	0	272	4	0	0	0	0.00	0	0	0.00	Exhaust	15	0
Ret. Fan Heat	0	0	0	0	0	0	0	0.00	0	0	0.00	Rm Exh	0	0
Duct Heat Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Auxiliary	0	0
Underflr Sup Ht Pkup	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Dwn	0	0
Supply Air Leakage	0	0	0	0	0	0	0	0.00	0	0	0.00	Leakage Ups	0	0
Grand Total ==>	5,452	0	6,648	100.00	4,851	100.00	-1,213	100.00	-1,213	-1,358	100.00	ENGINEERING CKS		

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION						
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass	Ent	Lvg					
	ton	MBh			MBh	cfm	°F	°F	gr/lb	°F					°F	gr/lb	ft²	(%)	MBh
Main Clg	0.6	6.7	5.4	230	76.0	63.6	72.9	53.9	53.0	62.0	Floor	152		Main Htg	-1.4	230	69.4	75.0	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	121		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	
Total	0.6	6.7									ExFlr	0		Humidif	-0.4	15	16.6	57.7	
											Roof	152	0	0	Opt Vent	0.0	0	0.0	0.0
											Wall	0	0	0	Total	-1.8			
											Ext Door	0	0	0					

Design Cooling Load Summary

By INGENOR MEXICO S.A. DE C.V.
CECIS UNIDAD COLIMA
COLIMA, COLIMA

System - COLIMA CESI UGAR
Zone - CESI

Coil Location - Zone

Coil Peak Calculation Time: December, hour 13
Ambient DB/WB/HR: 88 / 77 / 127

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	74,343		74,343	28.5%
Glass Transmission	6,489		6,489	2.5%
Wall Transmission	5,313		5,313	2.0%
Roof Transmission	4,597		4,597	1.8%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	5,851		5,851	2.2%
Net Ceiling Load	0		0	0.0%
Lighting	25,078		25,078	9.6%
People	25,277	24,600	49,877	19.1%
Misc. Equipment Loads	46,221	0	46,221	17.7%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	193,170	24,600	217,770	83.4%
Ventilation Load	8,842	23,678	32,519	12.5%
Exhaust Heat	0	0	0	0.0%
Supply Fan Load	10,867		10,867	4.2%
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	212,879	48,278	261,157	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	75.9 / 63.4 °F
Coil Entering Humidity Ratio	72.41 gr/lb
Coil Leaving Air (DB / WB)	53.9 / 53.0 °F
Coil Leaving Humidity Ratio	61.99 gr/lb
Coil Sensible Load	212.88 MBh
Coil Total Load	261.16 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	9,169.14 cfm
Resulting Room Relative Humidity	50.00 %

General Engineering Checks

Total Cooling Load	21.8 ton
Area / Load	191.63 ft²/ton
Total Floor Area	4,170 ft²
Cooling Airflow	2.20 cfm/ft²
Airflow / Load	421.32 cfm/ton
Percent Outdoor Air	6.5 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

Design Cooling Load Summary

By INGENOR MEXICO S.A. DE C.V.
CECIS UNIDAD COLIMA
COLIMA, COLIMA

System - COLIMA CESI UGAR
Zone - DELEGACIËN

Coil Location - Zone

Coil Peak Calculation Time: November, hour 15
Ambient DB/WB/HR: 91 / 78 / 131

COOLING COIL LOAD INFORMATION

COOLING COIL SELECTION

Load Component	Sensible Btu/h	Latent Btu/h	Total Btu/h	Percent of Total
Solar Gain	42,702		42,702	8.1%
Glass Transmission	4,739		4,739	0.9%
Wall Transmission	46,843		46,843	8.9%
Roof Transmission	45,735		45,735	8.7%
Floor Transmission	0		0	0.0%
Adj Floor Transmission	0		0.00	0.0%
Partition Transmission	16,449		16,449	3.1%
Net Ceiling Load	0		0	0.0%
Lighting	60,992		60,992	11.6%
People	46,182	42,845	89,027	17.0%
Misc. Equipment Loads	133,696	0	133,696	25.5%
Cooling Infiltration	0	0	0	0.0%
Sub-Total ==>	397,338	42,845	440,183	83.8%
Ventilation Load	17,332	45,156	62,488	11.9%
Exhaust Heat	0	0	0	0.0%
Supply Fan Load	22,359		22,359	4.3%
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	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	437,030	88,001	525,030	100.0 %

Coil Selection Parameters	
Coil Entering Air (DB / WB)	75.9 / 63.4 °F
Coil Entering Humidity Ratio	72.13 gr/lb
Coil Leaving Air (DB / WB)	53.9 / 53.0 °F
Coil Leaving Humidity Ratio	61.99 gr/lb
Coil Sensible Load	437.03 MBh
Coil Total Load	525.03 MBh
Cooling Supply Air Temperature	55.00 °F
Total Cooling Airflow	18,865.31 cfm
Resulting Room Relative Humidity	50.00 %

General Engineering Checks

Total Cooling Load	43.8 ton
Area / Load	235.09 ft ² /ton
Total Floor Area	10,286 ft ²
Cooling Airflow	1.83 cfm/ft ²
Airflow / Load	431.18 cfm/ton
Percent Outdoor Air	5.5 %
Cooling Load Methodology	CLTD-CLF (ASHRAE TFM)

System Component Selection Summary

By INGENOR MEXICO S.A. DE C.V.

Alternative 1

System Description: COLIMA CESI UGAR

System Type: Variable Temperature Constant Volume

Number of Zones: 2

Number of Rooms: 32

Component	Sizing Method	Location	Quantity
Cooling			
Main Clg Coil	Peak	Zone	2
Primary Clg Fan	Peak	Zone	2
Heating			
Main Htg Coil	Peak	Zone	2
Humidification Coil	Peak	Zone	2
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 ton	MBh	Sensible Capacity MBh	Airflow At Coil Peak cfm	Enter DB/ °F	WB/ °F	HR gr/lb	Leave DB/ °F	WB/ °F	HR gr/lb
	CESI		Main Clg Coil	12/13	21.8	261.2	212.9	9,169	75.9	63.4	72.4	53.9	53.0	62.0
	DELEGACIÉN		Main Clg Coil	11/15	43.8	525.0	437.0	18,865	75.9	63.4	72.1	53.9	53.0	62.0

Coil Location			Heating Coil Selection				
System	Zone	Room	Component	Total Capacity MBh	Airflow cfm	Entering Dry Bulb °F	Leaving Dry Bulb °F
	CESI		Main Htg Coil	-36.7	9,169	69.4	73.2
	CESI		Humidification Coil	-16.4	600		
	DELEGACIÉN		Main Htg Coil	-109.8	18,865	69.5	75.0
	DELEGACIÉN		Humidification Coil	-28.6	1,045		

Component Location			Miscellaneous Component Selection							
System	Zone	Room	Component	Design Airflow cfm	Ach/hr	Outside Air %	SADB Clg °F	Htg °F	Clg VAV Minimum cfm	Htg VAV Maximum cfm
COLIMA CESI UGAR			Optional Vent Fan	1,645		100				
COLIMA CESI UGAR			Return Fan	28,034						
COLIMA CESI UGAR			System Exhaust Fan	1,645						
	CESI		Primary Fan	9,169		6.5	55.0			
		CESI AVI PLANTA BAJA	Diffuser	6,999	10.3	7.1	55.0	73.0		
		CESI CO PLANTA BAJA	Diffuser	347	8.5	8.7	55.0	73.0		
		CESI IDF PLANTA BAJA	Diffuser	550	19.7	0.0	55.0	73.0		

System Component Selection Summary

By INGENOR MEXICO S.A. DE C.V.

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		
		CESI PR PLANTA BAJA	Diffuser	220	7.8	6.8	55.0	73.0		
		CESI SJ PLANTA BAJA	Diffuser	675	10.9	7.4	55.0	73.0		
		CESI VI PLANTA BAJA	Diffuser	378	20.9	1.3	55.0	73.0		
		DELEGACIËN	Primary Fan	18,865		5.5	55.0			
		DELEGAACIËN PR3 PLANTA ALTA	Diffuser	404	10.4	3.7	55.0	75.0		
		DELEGACION CE PLANTA ALTA	Diffuser	667	22.9	0.8	55.0	75.0		
		DELEGACION ET PLANTA ALTA	Diffuser	4,731	7.5	4.8	55.0	75.0		
		DELEGACION IDF PLANTA ALTA	Diffuser	605	21.4	0.8	55.0	75.0		
		DELEGACION PR10 PLANTA ALTA	Diffuser	411	12.9	3.7	55.0	75.0		
		DELEGACION PR7 PLANTA ALTA	Diffuser	227	7.5	6.6	55.0	75.0		
		DELEGACION PR9 PLANTA ALTA	Diffuser	227	7.5	6.6	55.0	75.0		
		DELEGACION SE-ET PLANTA ALTA	Diffuser	1,991	5.3	8.8	55.0	75.0		
		DELEGACION SE2 PLANTA ALTA	Diffuser	457	4.6	6.6	55.0	75.0		
		DELEGACIËN CC PLANTA ALTA	Diffuser	302	10.8	6.6	55.0	75.0		
		DELEGACIËN CO PLANTA ALTA	Diffuser	1,336	8.8	6.0	55.0	75.0		
		DELEGACIËN DE PLANTA ALTA	Diffuser	759	9.8	2.0	55.0	75.0		
		DELEGACIËN PR1 PLANTA ALTA	Diffuser	383	13.5	3.9	55.0	75.0		
		DELEGACIËN PR11 PLANTA ALTA	Diffuser	379	13.4	4.0	55.0	75.0		
		DELEGACIËN PR2 PLANTA ALTA	Diffuser	379	13.4	4.0	55.0	75.0		
		DELEGACIËN PR4 PLANTA ALTA	Diffuser	570	14.7	2.6	55.0	75.0		
		DELEGACIËN PR5 PLANTA ALTA	Diffuser	500	16.2	3.0	55.0	75.0		
		DELEGACIËN PR6 PLANTA ALTA	Diffuser	227	7.5	6.6	55.0	75.0		
		DELEGACIËN PR9 PLANTA ALTA	Diffuser	227	7.5	6.6	55.0	75.0		
		DELEGACIËN SJ1 PLANTA ALTA	Diffuser	935	15.7	5.4	55.0	75.0		
		DELEGACIËN SJ2 PLANTA ALTA	Diffuser	940	11.9	6.4	55.0	75.0		
		DELEGACIËN SJ3 PLANTA ALTA	Diffuser	193	6.3	10.4	55.0	75.0		
		DELEGACIËN SJ4 PLANTA ALTA	Diffuser	193	6.3	10.4	55.0	75.0		
		DELEGACIËN SL PLANTA ALTA	Diffuser	209	7.5	4.8	55.0	75.0		
		DELEGACIËN UM PLANTA BAJA	Diffuser	1,383	17.6	10.9	55.0	75.0		
		DELEGACION PR8 PLANTA ALTA	Diffuser	230	7.4	6.5	55.0	75.0		

ZONE PSYCHROMETRIC STATE POINTS

By INGENOR MEXICO S.A. DE C.V.

CESI

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	62.3	50.0	68.5	28.7	
Main System						
Return Fan						0.0
Return Air	75.0	62.3	50.0	68.5	28.7	
Return Air Heat Pickup						0.0
Outdoor Air	88.5	76.5	59.0	127.0	41.2	
Entering OA preconditioning	88.5	76.5	59.0	127.0	41.2	
Leaving OA preconditioning	88.5	76.5	59.0	127.0	41.2	
Return/Outdoor Air Mix	75.9	63.4	51.2	72.3	29.5	
Blow Through Fan						0.0
Entering Coil	75.9	63.4	51.2	72.3	29.5	
Leaving Coil	53.9	52.4	91.3	59.7	22.2	
Draw Through Fan						0.4
Fan Frictional Heat						0.8
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.9	87.6	59.7	22.5	
Supply Air	55.0	52.9	87.6	59.7	22.5	
Percent Outside Air	6.54					
Sensible Heat Ratio (SHR)	0.89	%				
Coil Airflow	9,169	cfm				

ZONE PSYCHROMETRIC STATE POINTS

By INGENOR MEXICO S.A. DE C.V.

DELEGACIÒN

	Dry Bulb °F	Wet Bulb °F	Relative Humidity %	Humidity Ratio gr/lb	Enthalpy Btu/lb	Temperature Difference °F
Space	75.0	62.3	50.0	68.5	28.7	
Main System						
Return Fan						0.0
Return Air	75.0	62.3	50.0	68.5	28.7	
Return Air Heat Pickup						0.0
Outdoor Air	90.3	77.0	55.8	126.9	41.6	
Entering OA preconditioning	90.3	77.0	55.8	126.9	41.6	
Leaving OA preconditioning	90.3	77.0	55.8	126.9	41.6	
Return/Outdoor Air Mix	75.8	63.3	50.9	71.8	29.4	
Blow Through Fan						0.0
Entering Coil	75.8	63.3	50.9	71.8	29.4	
Leaving Coil	53.9	52.4	91.1	59.6	22.2	
Draw Through Fan						0.4
Fan Frictional Heat						0.8
Supply Duct Heat Gain						0.0
Reheat Device						0.0
Cold Deck Supply Air	55.0	52.9	87.5	59.6	22.4	
Supply Air	55.0	52.9	87.5	59.6	22.4	
Percent Outside Air	5.54					
Sensible Heat Ratio (SHR)	0.90	%				
Coil Airflow	18,865	cfm				