TECHNICAL REPORT 2 7/30/2015



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EXECUTIVE SUMMARY

Technical Report 2 discusses the building and plant energy consumption for the buildings being added to the Sunnylands complex in Palm Springs, California. The information for this report has been obtained from architectural drawings from O2 Architecture as well as mechanical drawings from HGA Architects and Engineer. The gathered information was then analyzed using Trane Trace 700.

Through Trane Trace 700, the buildings at Sunnylands are modeled and analyzed for peak design loads, energy consumption and the operating costs for a year of use within the buildings. All assumptions made in the modeling process were influenced by assumptions stated in the design documents provided by HGA. If adequate information was not provided in the design documents, ASHRAE Standard 62.1 was consulted as well as load information provided in manufacturer cut sheets for individual elements in the spaces.

Each space in the conditioned buildings was modeled individually for this report due to the small size of the buildings. Each room is documented and assigned to the systems which service each building. The buildings are all served individually (no central plant was used on the campus) and therefore, each building has its own set of AHUs and heaters. The heating loads in the buildings are taken care of by electric heating while the cooling loads are treated with an air-cooled condenser.

For simplification in this report, not every building on campus will be discussed individually. Instead, the Administration Building (which is the most complex of the additions to the campus), will be examined in full and any calculations or information about the other buildings on campus can be found in the Appendix.

The loads calculated through the use of Trane Trace 700 are relatively low in comparison to the loads that are expected on site. The main building already on site (not a part of this design package) was also modeled through Trane Trace 700. The loads in that building are approximately 15-25% higher than those estimated through the energy model even after an updated model was created in hopes of finding more accurate ways to model design conditions in this design package. For this reason, the low estimation in the Trane Trace 700 model generated for the use of this report in comparison to the actual design is to be expected.

Through the use of Trace 700, the Administration Building is projected to 113,585 Btu per square foot per year and cost \$1.52 per square foot per year to operate and maintain. This result is difficult to analyze in terms of accuracy since the additions to the Sunnylands are still under construction. However, an approximate comparison to the existing building can be made. The current building on site is comparable to the administration building in terms of its uses. The main difference between the spaces is the number of electronics outputting heat in each space. The existing building currently would operate at approximately \$1.85 per square foot per year if it were connected to utility services instead of on-site power. This cost is very slightly greater than the cost to operate the Administration Building which is expected due to their different load types.

BUILDING OVERVIEW

The building in focus for this report is the Administration Building on Sunnylands Campus. The building is located on South side of the site as shown in Figure 1 and has a considerable amount of shading from the landscape on both its North and South sides as well as an appreciable overhang on the facades that are heavily clad in glass. In addition to the vegetation and structural overhangs, there is also a semi-permeable awning that will be installed in the North courtyard as shown below in Figure 2. These factors all contribute to the shading factors applied on these facades.

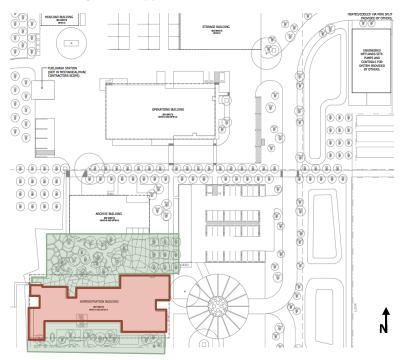




FIGURE 3 SITE PLAN COURTESY OF HGA ARCHITECTS AND ENGINEERS

FIGURE 1 OPEN OFFICE RENDERING COURTESY OF O2



FIGURE 2 ADMINISTRATION BUILDING SHADED COURTYARD RENDERING COURTESY OF O2 ARCHITECTURE

The Administration building is the most occupant dense building being added to the Sunnylands campus. The building will house offices used for those who work for The Annenberg Foundation Trust. The Administration Building is also the most energy intensive addition to the campus. The spaces within can generally be broken down into two space types: office and gathering. The offices include a mix of open office space as well as private offices for the directors. Gathering spaces include meeting rooms, breakout rooms and space for the employees to take their breaks while enjoying the beautiful views of Sunnylands' campus. Aside from the occupiable spaces are the mechanical and electrical spaces which are located on the South-East corner of the building and restrooms/ locker rooms scattered throughout the building.

MECHANICAL SYSTEMS OVERVIEW

The buildings on the Sunnylands campus are all treated in one of three ways:

- 1. Return air utilizes an energy recovery wheel, combines with outdoor air and is treated at the zone level through DX and/or and electric coil
- 2. Return air is mixed with outdoor air and treated at zone level with DX cooling and/or electric coil heating and is then treated with an electric humidifier in line with the supply air duct
- 3. 100% outdoor air utilizes and energy wheel and is then supplied to spaces with contaminated air that cannot be re-circulated

The Administration Building falls under category 1. The rooftop unit (RTU-1A) handles at most 3750 CFM with a bi-plenum fan. The air can travel through an energy wheel or bypass the wheel which operates at 80% effectiveness. The air then is then cooled using a variable refrigerant flow direct expansion system or is heated using electric heating coils. At this point, the air is ready to be supplied to the zones.

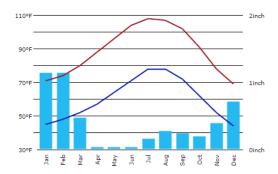
The building is served by a rooftop unit that supplies air to the ceiling cavity at 75°F DB / 64°F WB where it is then cooled in the space through the use of fan coil units connected in a direct expansion system. These fan coil units then supply air to the spaces at 58°F DB 50°F WB when in cooling mode or 95°DB when in heating mode.

BUILDING LOAD ESTIMATION

DESIGN CONDITIONS

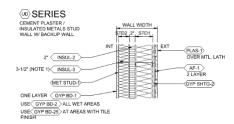
Location

The addition to the Sunnylands campus is located in Palm Springs, California and falls under climate zone 3b which is characterized as warm and dry. The temperatures in this region range from around 40°F at peak heating design and around 110°F in peak cooling. Figure 4 at right shows this distribution of temperatures as well as precipitation in inches. The site for the new construction studied in this report is an addition to an existing campus. The addition will total to 18% of the total acreage owned by the Annenberg Foundation Trust. FIGURE 4 WEATHER DATA COURTESY OF HGA



Building Construction

The Administration building at Sunnylands is a one story, two part building. The East part of the building contains the entrance, restrooms, back of house spaces, and space for the president of the Annenberg Foundation Trust. This space, outlined in green blow, is enclosed with mostly wall type 3, depicted at right. This wall contains three layers of insulation and is supported by metal studs. In contrast to this section, the East side of the building, outlined below in blue, in composed mostly of a curtain wall. While the open office area on the West side of the building has a low thermal resistance, there are overhangs (shown below in yellow) that provide ample shading above all curtain walls. Since the driving design mode in Palm Springs is cooling, the overhang



PTN TYPE	STUD 1 WIDTH	CAVITY INSUL. (BATT)	STUD 2 WIDTH	CAVITY INSUL. (BATT)	WALL WIDTH ACTUAL	AVAIL. FIRE RESISTANCE	NOTES
(D63	6"	R-19	3-5/8*	R-15	13-3/4"	1-HOUR	
NOTE: 8	SOME PAR	TITION TYP	ES DESCR	IBED ABOV	E MAY NOT	BE REQUIRED ON T	THIS PROJECT.

FIGURE 6 WALL SECTION COURTESY OF O2

helps combat any direct gains from the sun, thus reducing the amount of heat that would otherwise need to be removed from the space.

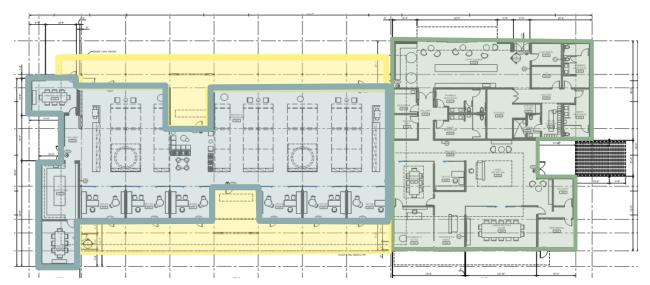


FIGURE 5 EXTERIOR WALL ASSEMBLIES CLASSIFICATION COURTESY OF O2 ARCHITECTURE

Table 1 below documents the exterior assemblies used in the addition to the Sunnylands campus, their associated U values, and their shading coefficients. The assemblies used in the Administration building are highlighted in green. Wall Type 1 is mostly used in the East section highlighted in green while Window Assemblies 1 and 2 are used primarily in the West section highlighted in blue.

TABLE 1 HEAT TRANSFER RATE OF EXTERIOR ASSEMBLIES

Assembly Name	Description	U Value	Shading Coefficient
Wall Type 1	Cement Plaster with Metal Stud with Backup Wall	0.02347	-
Wall Type 2	Cement Plaster with Metal Stud	0.03106	-
Wall Type 3	Medium Weight Concrete Block with Insulation	0.03704	-
Wall Type 4	Medium Weight Concrete Block	0.10869	-
Window Assembly 1	Fritted Two Pane with Argon	0.24000	0.27
Window Assembly 2	Two Pane with Argon	0.48000	0.78
Roof Assembly SA1	8" Concrete on Metal Deck	0.04542	-
Roof Assembly SA2	4" Concrete on Metal Deck	0.06811	-
Skylight	Operable Two Pane Window	2.21645	0.22

LOAD ASSUMPTIONS

Occupancy & Ventilation

Occupant densities for the Administration building is determined by information provided by the Annenberg Foundation Trust. The number of occupants is determined by the number of employees who will occupy the office space on a regular basis. The number of occupants provided by the Annenberg Foundation Trust is lower than the predicted number of occupants estimated by ASHRAE 62.1 Standards. The occupant densities provided by the owner were used in the TRACE model in order to account for ventilation rates.

Lighting

All information regarding lighting has been taken from the electrical drawings provided by HGA Architects and Engineers. The main concern

Schedule

Rooms that will be occupied constantly throughout the workday (offices and reception areas) are assumed to be occupied for 6 hours per day, Monday through Friday. The remaining two hours per work day assume offices may be unoccupied during the day for meetings in the workrooms and meeting rooms as well as an hour long lunch break taken by 60% of employees in the Staff Lounge. The occupancy of these spaces are diversified to reflect the number of hours per week they can be expected to be occupied.

SYSTEM EQUIPMENT

Heating & Cooling

In Palm Springs, California, the main concern for the buildings at Sunnylands is cooling. Electric heating is used on site since there are so few heating days, it doesn't make sense to extend a natural gas line to the site. The heating takes place in the rooftop unit which is built from three, 30 kW electric heating coils. The air leaves these coils at a maximum temperature of 89°F at the Administration Building, 101.2° in the Archive Building, 93.2°F in the Operations Building, and 87.8°F in the Storage Building.

The cooling for the Administration Building is accomplished through a DX Administration Building is accomplished through a DX system in conjunction with VRF supplied to FCUs within the spaces. These units supply air to the occupiable spaces at temperatures varying between 52 and 75 degrees depending on the needs of the space.

Air-Side Equipment

Each new building being added to the Sunnylands campus is getting its own rooftop unit. The table below documents which units are associated with which building and what key features it contains.

TABLE 2 DOCUMENTATION	OF ROOFTOP HNITS IN	ICLUDED IN DESIGN PACKAGE
TABLE & DUCUMENTATION	OF KOOFIOP ONLISTIN	CLUDED IN DESIGN FACKAGE

ITEN 4	ITEM LOCATION	MAX	ENERGY	EFFECTIVENESS	COOLING	COOLING	HEATING
ITEIVI	LOCATION	CFM	WHEEL	EFFECTIVENESS	MBH	SUPPLY	SUPPLY
RTU-1A	ADMIN	3750	YES	80%	142.3	58ºF	87 ºF
RTU-1B	ARCHIVE	1250	YES	80%	57.1	53 ºF	101.2 ºF
RTU-1C	OPERATIONS	2000	YES	80%	80.1	50 ºF	93.2 ºF
RTU-1D	STOAGE	3750	NO	N/A	142.3	58 ºF	87.8 ºF

The Administration Building is the largest of the buildings on-site in terms of geometric size and the number of occupants within the space. The rooftop unit supplying this air to the Administration Building, RTU-1A, is located on the roof on the East side of the building.

CONCLUSION

In this report, Trane Trace 700 is used to analyze the energy needs of the buildings being added to the Sunnylands campus. While the values calculated for this report are generally close to those generated by HGA Architects and Engineers, the mechanical design tem on the project, they are not close enough to be considered the same. The discrepancies in values can be attributed to two main sources. The first source would be prior knowledge. HGA worked on a project called College of the Desert which is located less than 5 miles away from the site of the Sunnylands campus. By working on a project with near identical design conditions, HGA has an advantage for knowing how a building will perform in that area. With this knowledge, they were able to tweak their design of the Sunnylands buildings proportional to the tweaks required in their final models of the College of the Desert. Additionally, HGA had access to the utility usage of the existing buildings on campus during their design phase which the owner has not shared for the purposes of this thesis work.

ANNUAL ENERGY CONSUMPTION

FUEL CONSUMPTION

The new buildings at the Sunnylands campus are fueled by electricity. There is no natural gas feed to the buildings.

The electrical energy consumption is broken down into five categories for the purpose of understanding what equipment is consuming the greatest portion of energy. The categories include: Cooling Equipment, Heating Equipment, Lights, Fans, and Miscellaneous Loads. The ratio of the energy consumed by these sources can be found at right in figure 7.

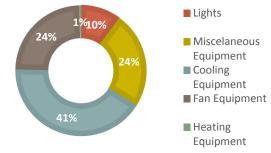


Figure 7 Visual Breakdown of Energy Consumption in Administration Building – Generated from TRACE $700\,$

Below, in figure 8, a further breakdown of these categories can be found based on monthly consumption in kWh. Since Palm Springs, California is a predominately cooling-dominated climate, the electrical consumption

peaks drastically in the warmest months. It also becomes obvious that minimal heating will only be required for approximately four months of the year.

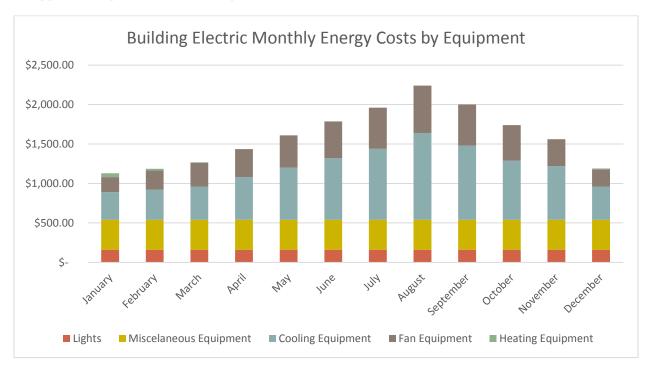


FIGURE 8 VISUAL BREAKDOWN OF ELECTRICITY CONSUMPTION BY MONTH - GENERATED FROM TRACE 700 DATA

WATER CONSUMPTION

Since water conservation was a main goal in the design process of the Sunnlyands facilities, there are no water-based cooling systems implemented in the mechanical design of the buildings. Any and all water consumption on the new site can be attributed to occupant use. The only new building that will consume water in the mechanical system is the Archival Building. This building has spaces that require certain humidity levels to preserve the works housed within. Therefore, these spaces require humidifiers and therefore, water consumption.

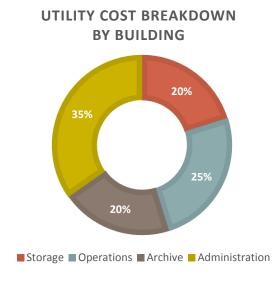
ANNUAL CONSUMPTION RESULTS

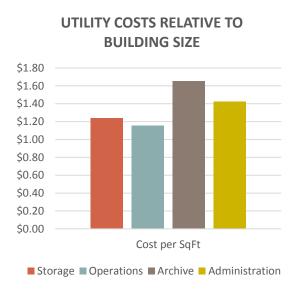
The Administration Building's use demand electricity as documented above demonstrate the standard consumption peaks as expected in a cooling dominated climate zone. The cost of operating the cooling equipment is the largest cost the owner will experience. Additional costs not documented for this process include pumps which were not yet selected at the time the Trace 700 model used for this report was developed. A secondary model was generated with a generic pump modeled. This secondary model documented an increase of approximately 6.5% in the overall cost of operation of the Administration Building documented in the cooling equipment category.

ANNUAL OPERATING CONSUMPTION

OVERVIEW

The yearly operational cost of the Administration building totals to \$22,131 which breaks down to \$1.65 per square foot each year. The cost of operating the Administration building is 35% of the total \$55,019.52 per year operational cost of the four buildings added to the Sunnylands campus. With a total added square footage of 40,930 square feet across the four new buildings, the average yearly operational cost per square foot is \$1.34.





EQUIPMENT OPERATING COSTS

Below in table 3, there is a breakdown of costs per month associated with each type of energy consumption. The largest energy consumer across all months of the year is the cooling equipment. If a more efficient system could be selected, it would greatly reduce the owners operating costs. Additionally, the cost of operating the fans could greatly be reduced if they were designed to run on variable speed drives instead of constant speeds.

Table 3 Breakdown of Operating Costs by Month

Category	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Total
Lights	2495	2258	2733	2377	2614	2614	2377	2733	2377	2614	2495	2377	30064
Miscellaneous Loads	7542	6815	7704	7273	76232	7435	7461	7704	7273	7623	7344	7461	157867
Site Lighting	3720	3360	3720	3600	3720	3600	3720	3720	3600	3720	3600	3720	43800
Air Cooled Unitary	6986	7162	9577	11941	15121	17930	20741	21816	19106	14576	9458	7859	162273
Refrigerant Pump	2914	2704	2973	2918	2991	2982	3119	3078	2918	2991	2900	2937	35427
Heating	631	262	150	0	0	0	0	0	0	0	53	331	1428
VRV Indoor fan 1	514	498	669	751	923	1035	1131	1179	1037	876	657	541	9810
VRV Indoor fan 2	158	147	185	188	214	224	233	245	222	212	179	160	2368
VRV Indoor fan 3	248	258	376	456	581	656	704	722	622	514	363	274	5773
VRV Indoor fan 4	233	211	240	234	247	246	253	260	246	246	231	233	2880
VRV Indoor fan 5	559	569	724	743	865	917	1039	1056	975	850	700	606	9603
VRV Indoor fan 6	70	67	89	95	117	132	134	151	125	109	82	72	1243
VRV Indoor fan 7	241	246	321	307	357	426	506	587	583	490	350	264	4678
VRV Indoor fan 8	436	394	456	361	336	380	507	670	772	705	545	458	6021
VRV Indoor fan 9	73	87	149	219	328	410	443	448	335	215	116	83	2905

VRV Indoor fan 10	75	57	67	50	69	92	125	150	144	111	79	88	1108
VRV Indoor fan 11	113	134	255	375	537	635	677	670	498	323	156	116	4488
VRV Indoor fan 12	75	56	66	49	67	89	121	146	141	110	79	87	1087
VRV Indoor fan 13	113	134	255	375	537	635	677	670	498	323	156	116	4488
VRV Indoor fan 14	223	198	260	303	396	441	529	557	487	351	257	235	4237
VRV Indoor fan 15	99	126	233	355	516	622	675	678	513	328	150	108	4403
VRV Indoor fan 16	46	30	45	57	81	110	147	167	151	96	49	41	1019
VRV Indoor fan 17	75	56	66	49	67	89	121	146	141	110	79	87	1087
VRV Indoor fan 18	102	131	248	376	544	650	700	694	516	327	158	110	4555
VRV Indoor fan 19	75	57	67	50	69	92	125	150	144	111	79	88	1108
VRV Indoor fan 20	170	167	302	443	628	749	825	827	639	424	211	168	5551
VRV Indoor fan 21	13	7	17	26	45	69	86	101	84	48	18	10	524
VRV Indoor fan 22	26	35	58	88	135	186	220	253	207	128	54	38	1427
VRV Indoor Fans	3736	3668	5147	5948	7659	8885	9978	10528	9083	7006	4747	3981	80365

ENERGY CONSUMPTION BY CATEGORY EACH MONTH

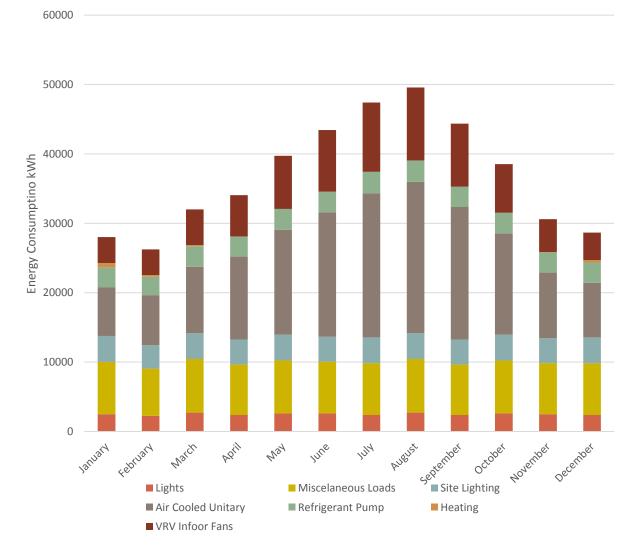


FIGURE 9 ENERGY CONSUMPTION BY CATEGORY EACH MONTH

ANNUAL COST RESULTS

The costs generated in the Trace 700 model used for this report are within 15% of those predicted by HGA Architects and Engineers. It is difficult to gauge the accuracy of these numbers without any current operation data on the building. However, it can be expected that any variance in operation cost will be a percentage difference across all equipment, with no large discrepancies in any particular category. Therefore, recommendations for reducing energy consumption can still be made.

EMISSIONS

The amount of energy consumed on site at the Sunnylands complex is the greatest offender to the environment. With approximately 250,472 pounds of CO2 produced on a yearly basis from electricity consumption in the Administration Building, Carbon Dioxide is the most abundant byproduct of operation.

The other pollutants tracked in this report include SO2 (181 gm/yr.) and NOX compounds (141 gm/yr.). These byproducts, when released into the environment contribute to the global greenhouse effect. It is the social responsibility of designers to reduce this impact as much as possible. In order to do this, the types of refrigerants used on site must be closely analyzed.

REFERENCES

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ANSI/ASHRAE. (2010). Standard 90.1-2010, Energy Standard for Buildings Except Low Rise Residential Buildings. Atlanta, GA: American Society of Heating Refrigeration and Air Conditioning Engineers, Inc.

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Trane Trace® 700 Version 6.3.0. for Academic Use

APPENDIX A - TRACE 700 OUTPUTS

A01 SECURITY

Room Checksums

By ACADEMIC

	COOLING	COIL PEAK		(CLG SPACE	PEAK		HEATING (OIL PEAK	TEMPERATURES				
Pea	ced at Time: Outside Air:		ir: 7/16 R: 88/71/85	;	Mo/Hr: OADB:			Mo/Hr: OADB:	Heating Design 40		SADB	Cooling 59.0	Heating 75.0	
											Ra Plenum	82.1	67.3	
	Space	Plenum	Net	Percent:	Space	Percent		Space Peak	Coil Peak	Percent	Return	82.1	67.3	
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total		Space Sens	Tot Sens	Of Total	Ret/OA	83.0	63.€	
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		Btu/h	Btu/F	(%)	Fn MtrTD	0.1	0.0	
Envelope Loads		//37		1.07	47	1,000	Envelope Loads		/ / / / / /	1.07	Fn BldTD	0.3	0.0	
Skylite Solar	0	0	0	0:	0	0	Skylite Solar	0		0.00	Fn Frict	0.9	0.0	
Skylite Cond	0	0	0	0:4	0	0	Skylite Cond	0		0.00		200	(6)	
Roof Cond	0	804	804	20	0	0	Roof Cond	0	-310	16.90				
Glass Solar	0	0	0	0:	0	0	Glass Solar			0.00	Al	RFLOWS		
Glass/Door Cond	0	0	0	0;	0	0	Glass/Door Cond	0	(0.00		Cooling	Heatin	
Wall Cond	606	116	722	18:	684	27	: Wall Cond	-601	-737	40.17		2000		
Partition/Door	0		0	0:	0	0		0	(0.00	Diffuser	146		
Floor	0		0	0:	0	0	Floor	0		0.00	Terminal	146		
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	(Main Fan	146		
Infiltration	208		208	5:	108	4	Infiltration	-241	-241	13.12	Sec Fan	0		
Sub Total ==>	814	920	1,734	42:	792	31	Sub Total ==>	-841	-1,288	70.19	Nom Vent	20	W 2	
							Total National Control				AHU Vent	20	9	
Internal Loads				:			Internal Loads				Infil	7		
Lights	149	37	186	5	149	6	Lights	0	0	0.00	MinStop/Rh	0		
People	450	0	450	11	250	10	People	0			Return	153		
Misc	1,179	ő	1,179	29	1,179	46	Misc	1,179	1,179		Exhaust	27		
				5.50	1.578	61			1.00		Rm Exh	0		
Sub Total ==>	1,778	37	1,816	44	1,578	61	Sub Total ==>	1,179	1,179	-64.25	Auxiliary	0		
Ceiling Load	204	-204	0	0	206	8	Ceiling Load	-77	0	0.00	Leakage Dwn	0		
Ventilation Load	204	-204	571	14	0	8	Ventilation Load	-//	-661			0		
		U						0	-001		Leakage Ups	U		
Adj Air Trans Hea	100		0	0;	0	0	Adj Air Trans Heat			2 (57.8)				
Dehumid. Ov Sizi			0	0	1790		Ov/Undr Sizing	-1,064	-1,064		10.4070704.000		and the same of	
Ov/Undr Sizing	0	040	0	0:	0	0	Exhaust Heat		80		ENGIN	IEERING CI	KS	
Exhaust Heat		-213	-213	-5 ; 5 ;			OA Preheat Diff.					Cooling	Heating	
Sup. Fan Heat		0	216 0	0:			RA Preheat Diff.		(% OA	13.7	13.7	
Ret. Fan Heat		0	0	0:			Additional Reheat System Plenum Heat		-81		cfm/ft²	1.60	1.60	
Duct Heat Pkup		U	0	0:					-01		cfm/ton	424.27	1.00	
Underfir Sup Ht P		0	0	0:			Underfir Sup Ht Pkup	,				264.87		
Supply Air Leakag	e	Ü	U	0:		7	Supply Air Leakage			0.00	ft²/ton		00.45	
Grand Total ==>	2,796	540	4,123	100.00	2,576	100.00	Grand Total ==>	-803	-1,835	100.00	Btu/hr·ft² No. People	45.31 1	-20.17	
		COOLING	COIL SELE	CTION		Ī À	T A H	AREAS	1	н	EATING COIL	SELECTIO	N	
	Total Capacity	Sens Cap. C	oil Airflow	Enter C	B/WB/HR	Leave	DB/WB/HR	Gross Total	Glass	00020	Capacity	Coil Airflow	Ent L	
	ton MBh	MBh	cfm	°F °F	gr/lb	°F	°F gr/lb []		ft2 (%)		MBh	cfm	°F	
Main Clg	0.3 4.1	3.6	146	84.3 66.1		59.0 5	- Fig	91	2000 10 3 000	Main Htg	-1.8	146	63.6 7	
Main Cig Aux Cig	0.3 4.1	0.0	146	0.0 0.0			0.0 0.0 Part	0		Aux Htg	-1.8	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 Do ExFir	0		Preheat	0.0	0	0.0	
Total	0.3 4.1						Roof	91		Humidif	0.0	0	0.0	
							Wall	224	0 0	Opt Vent	0.0	0	0.0	
							Ext Do	or 0	0 0	Total	-1.8			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A02 RECEPTION / LOBBY

	CO	OLING C	COOLING COIL PEAK							HEATING	COIL P	EAK	TEMPERATURES				
Pe	eaked at Outsid			o/Hr: 9 / 10 J/HR: 79 / 62 / 5	8	Mo/Hr: OADB:		:		Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 55.0 77.1		75.0 67.3
		Space	Plenum	Net	Percent	Space	Percent	1		Space Peak		Coil Peak	Percent	Return	77.1		67.3
	Se	ns. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens	of Total	Ret/OA	77.2		65.8
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	-	Btu/f	1 (%)	Fn MtrTD	0.1		0.0
Envelope Loads			100			47		Envelope L	oads			7 7	100	Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0			0		(0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co	ond	0			0.00		200		200
Roof Cond		0	369	369	4	0	0	Roof Con	d	0		-525	5 14.52				
Glass Solar		5,839	0	5,839	62 :	6,539	83			- 0		(0.00	A	IRFLOWS		
Glass/Door Co	nd	82	0	82	1:		-5			-1,847		-1,847	51.11	~~	Cooling	Но	ating
Wall Cond		212	97	309	3:		1		d	-316		-465		Diff	2012 E 2010 M		
Partition/Door		0		0	0:		0		Door	0		(Diffuser	356		356
Floor		0		0	0:		0	Floor		0		(0.00	Terminal	356		356
Adjacent Floor		0	0	0	0	0	0	Adjacent	Floor	0		(0.00	Main Fan	356		356
Infiltration		203		203	2:	-56	-1	Infiltration		-407		-407	7 11.27	Sec Fan	0		0
Sub Total ==>		6,336	467	6,802	72:	6,174	79	; Sub Total	==>	-2,571		-3,244	89.76	Nom Vent	20		20
								1						AHU Vent	20		20
Internal Loads								Internal Loa	ds					Infil	12		12
Lights		538	134	672	7	611	8	Lights		0			0.00	MinStop/Rh	0		0
People		376	0	376	4		3			0				Return	368		368
Misc		788	0	788	8	788	10			788		788		Exhaust	32		32
					51		21			197				Rm Exh	0		0
Sub Total ==>		1,702	134	1,836	19	1,619	21	Sub Total	==>	788		788	3 -21.81	Auxiliary	Ö		0
Ceiling Load		104	-104	0		57		Ceiling Loa		-130		(0.00	Leakage Dwn	0		0
Ventilation Load	e	104	-104	329	0:		0	Ventilation		-130		-661			0		0
			U		3:					0		-00		Leakage Ups	U		U
Adj Air Trans He		0		0	0	0	0	Adj Air Tran		10.78			2 (57.0)				
Dehumid. Ov Si	zing	7977		0	0 ;		-	Ov/Undr Siz		-49		-49		100000000000000000000000000000000000000		2-2-2-7	
Ov/Undr Sizing		0	70	0	0:		0	Exhaust He				95		ENGI	NEERING C	KS	
Exhaust Heat			-76	-76	-1:			OA Preheat				(Cooling	Hoa	ating
Sup. Fan Heat			0	528	6;			RA Preheat				(% OA	5.6	riea	5.6
Ret. Fan Heat			0	0	0:			Additional F				-543		cfm/ft²	2.31		2.31
Duct Heat Pkup	Disco		U	0	0:							-54		cfm/ton	453.67		2.51
Underfir Sup Ht	5 125 13 15 51		0	0				Underfir Su									
Supply Air Leak	age		0	0	0			Supply Air	_eakage			(0.00	ft²/ton	196.20	200	27.22
Grand Total ==>		8,141	421	9,419	100.00	7,850	100.00	Grand Total	==>	-1,963		-3,614	100.00	Btu/hr-ft² No. People	61.16	-2.	3.47
			COOLING	G COIL SELE	CTION		ĒÀ			AREAS	6	1	Н	EATING COIL	SELECTIO	N	_
	Total	Capacity	Sens Cap.	Coil Airflow	Enter	DB/WB/HR	Leav	e DB/WB/HR		Gross Total	Glass	.	(200	Capacity	Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm		°F gr/lb	°F	°F gr/lb	1		ft²	(%)		MBh	cfm	°F	
Main Cla	0.8	9.4	8.8	356	78.6 58		55.0 4		Floor	154			Main Ut-	-3.6	356	65.8	75.0
Main Clg	0.0	0.0	0.0	350		0.0 0.0		0.0 0.0	Part	0			Main Htg Aux Htg	0.0	356	0.0	0.0
Aux Clg					3 10123 1				1000000			- 1					
Opt Vent	0.0	0.0	0.0	C	0.0	0.0	0.0	0.0 0.0	Int Door				Preheat	0.0	0	0.0	0.0
1200									ExFlr	0		, I	25771395555	11200	-		
Total	8.0	9.4							Roof	154	0	0	Humidif	0.0	0	0.0	0.0
									Wall	243	100	41	Opt Vent	0.0	0	0.0	0.0
									Ext Doo	r 0	0	0	Total	-3.6			

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By ACADEMIC

A04 LARGE MEETING ROOM

COOLING COIL PEAK						CLG SPACE	PEAK			HEATING	COILF	PEAK	TEM	PERATURE	s		
P	eaked a	it Time: iide Air:		Hr: 11 / 14 HR: 77 / 60 / 4	9 :	Mo/Hr: OADB:				Mo/Hr: OADB:		Design		SADB Ra Plenum	Cooling 55.0 76.7	7	75.0 68.9
		Space	Plenum	Net	Percent :	Space	Percent			Space Peak		Coil Peak	Percent	Return	76.7		68.9
	5	ens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	76.7		67.7
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	W /	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	5	Diam	Diam	Didan	(70)	Dia.	(70)	Envelope Lo	ads	J. J. J.		Dian	(70)	Fn BldTD	0.3		0.0
Skylite Solar	3	0	0	0	0:	0	0	Skylite So		0	/ /	/ 0	0.00	Fn Frict	0.9		0.0
Skylite Cond		ő	0	o o	0:4	o o	0/	Skylite Co		0		, o		THITHEX	0.0		0.0
Roof Cond		0	2.449	2.449	5	0	0	Roof Cond		0		-1,930					
Glass Solar		39,568	0	39,568	80 ·	40,792	94	Glass Sola		0		0	400000000000000000000000000000000000000	_ A	IRFLOWS		
Glass/Door Co	ond	79	0	79	0:	-462	-1	Glass/Doo	or Cond	-4,256		-4,256	22.60		Cooling	115	ating
Wall Cond		0	377	377	1:	0	0	Wall Cond	1	0		-186	0.99		20022000		
Partition/Door		0		0	0:	0	0 :	Partition/D	oor	0		0	0.00	Diffuser	1,975		1,975
Floor		0		0	0:	0	0	Floor		0		0	0.00	Terminal	1,975		1,975
Adjacent Floo	r	0	0	0	0:	0	0	Adjacent I	Floor	0		0	0.00	Main Fan	1,975		1,975
Infiltration		132		132	0 :	-80	0	Infiltration		-1,418		-1,418	7.53	Sec Fan	0		0
Sub Total ==>	į.	39,780	2,826	42,606	86:	40,249	92	Sub Total	==>	-5,674		-7,790	41.36	Nom Vent	80		80
													0.00000000	AHU Vent	80		80
Internal Loads								Internal Load	ds					Infil	43		43
Lights		1.772	443	2,215	4	1,772	4	Lights		0		0	0.00	MinStop/Rh	0		0
People		900	0	900	2:	500	/ 7	People		0		Ö		Return	2,018		2,018
Misc		773	0	773	2:	773	2	Misc		0		Ö	200000000	Exhaust	123		123
		3.445	443	3,888	8:	3,045	7	Sub Total	A/	0		0		Rm Exh	0		0
Sub Total ==>		3,445	443	3,000	٥:	3,043	1.0	Sub Total	7-1	U			0.00	Auxiliary	0		0
Ceiling Load		290	-290	0	0:	236		Ceiling Load		-193		0	0.00	Leakage Dwn	37.		0
Ventilation Loa	d	0	-290	247	0:	0		Ventilation L		0		-2,645		Leakage Ups	Ö		0
Adi Air Trans H		0		0	0:	0		Adj Air Trans		0		_,_,_		Leakage Ops			
Dehumid. Ov S		U		0	0:	U	U :	Ov/Undr Sizi		-7,949		-7,949	3 350				
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Hea		-1,543		154		FNO	UEEDING O		
Exhaust Heat	8	U	-231	-231	0:	U	U :	OA Preheat				0		ENGI	NEERING C	15	
Sup. Fan Heat			-201	2,925	6:			RA Preheat				Ö			Cooling	Hea	ting
Ret. Fan Heat			0	0	0:			Additional R				Ö		% OA	4.1		4.1
Duct Heat Pkur			0	0	0:			System Plen				-604		cfm/ft²	3.68	;	3.68
Underfir Sup H			(50)	ő	0:			Underfir Su				0	2 283350000	cfm/ton	479.33		207.5
Supply Air Lea			0	0	0:			Supply Air L				0	0.00	ft²/ton	130.11		
ouppiy All Lou	uge							oupply All E	- Cunugo				0.00	Btu/hr-ft²	92.23	-29	9.67
Grand Total ==	>	43,516	2,747	49,435	100.00	43,530	100.00	Grand Total	==>	-13,816		-18,834	100.00	No. People	4		
			COOLING	COIL SELE	CTION		ĒÀ	7 7		AREAS			НЕ	ATING COIL	SELECTIO	N	
	Tot	al Capacity		Coil Airflow		DB/WB/HR	Leave	DB/WB/HR		Gross Total	Glas	s	05.55		Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm	°F °1	gr/lb	°F	°F gr/lb	1	James Co.	ft ²	(%)		MBh	cfm	°F	°F
Main Clg	4.1	49.4	49.0	1,975	78.1 59.	3 48.2	55.0 50	0.5 48.2	Floor	536			Main Htg	-15.9	1,975	67.7	75.0
Aux Clg	0.0	0.0	0.0	1,975				0.0 0.0	Part	536			Aux Htg	0.0	1,975	0.0	0.0
									100 3723	9.70							
Opt Vent	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	4.1	49.4							Roof	536	0	0	Humidif	0.0	0	0.0	0.0
(understand)		355430							Wall	288	230		Opt Vent	0.0	0	0.0	0.0
									Ext Door	. 0	0	0	Total	-15.9			esselle.
									EAL DOOL	v	U		rotar	-10.5			

Project Name: Sunnylands

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A05 PRESIDENTS ASSISTANT

	COOLING	OIL PEAK		(LG SPACE	PEAK			HEATING	COIL PEAK		TEMP	PERATURE	S
Pea	ked at Time:		Hr: 7/15		Mo/Hr:					Heating Design		1987-5-1	Cooling	Heating
	Outside Air:	OADB/WB/H	IR: 89 / 70 / 8	1 :	OADB:	89			OADB:	40		SADB	59.9	76.3
												Ra Plenum	78.3	68.8
	Space	Plenum	Net	Percent :	Space	Percent			Space Peak	Coil Peak	Percent	Return	78.3	68.8
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens	Tot Sens	Of Total	Ret/OA	78.8	67.4
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	Btu/h	(%)	Fn MtrTD	0.1	0.0
Envelope Loads		487			47		Envelope Lo	oads				Fn BldTD	0.3	0.0
Skylite Solar	0	0	0	0:	0	0	Skylite So	lar	0	0	0.00	Fn Frict	0.9	0.0
Skylite Cond	0	0	0	0:4	0	0	Skylite Co	ond /	0	0	0.00		200	(0.00
Roof Cond	0	2.971	2,971	27	0	0	Roof Con	d	0	-1,092	27.38			
Glass Solar	3,245	0	3,245	29 ·	3,245	48	Glass Sol	ar	0	0	0.00	AI AI	RFLOWS	
Glass/Door Cond	776	0	776	7:	776	12	Glass/Doo	or Cond	-1,892	-1,892	47.45	5.5965	OU	Heade
Wall Cond	0	56	56	1:	0	0	Wall Cond	1	0	-82	2.07		Cooling	
Partition/Door	0		0	0:	0	0	Partition/E	Door	0	0	0.00	Diffuser	405	
Floor	0		0	0:	0	0	Floor		0	0	0.00	Terminal	405	
Adjacent Floor	0	0	0	0:	0	0	Adiacent	Floor	0	0	0.00	Main Fan	405	40
Infiltration	628	18.0	628	6:	375	6	Infiltration		-804	-804		Sec Fan	0	11
Sub Total ==>	4,649	3.027	7,676	69:	4,396	65			-2.696	-3,870		Nom Vent	20	
Sub Iolai>	4,043	3,027	7,070	03:	4,330	05	Cub rotus		2,000	0,010	07.07	AHU Vent	20	
Internal Leads							Internal Loa	ds						
Internal Loads								45				Infil	24	
Lights	942	236	1,178	11	942	14	Lights		0	0		MinStop/Rh	0	
People	450	0	450	4:	250	4	People		0	0	10000000	Return	429	
Misc	819	0	819	7:	819	12	Misc		0	0	0.00	Exhaust	44	4
Sub Total ==>	2,212	236	2,447	22:	2,012	30	Sub Total	==>	0	0	0.00	Rm Exh	0	
					10000				- 2			Auxiliary	0	
Ceiling Load	316	-316	0	0:	316	5	Ceiling Load	1 /	-117	0	0.00	Leakage Dwn	0	9
Ventilation Load	0	0	517	5	0	0	Ventilation L	.oad	0	-661	16.59	Leakage Ups	0	1
Adj Air Trans Hea	t 0		0	0:	0	0	Adj Air Tran	s Heat	0	0	0			
Dehumid. Ov Sizi	na della		0	0:	180	-	Ov/Undr Siz		0	0	0.00	3		
Ov/Undr Sizing	0		0	0:	0	0	Exhaust Hea		0.00	59		ENGIN	EERING CI	ve
Exhaust Heat	· ·	-160	-160	-1:	U	Ü	OA Preheat	N7.0		0		ENGIN	EEKING CI	N.S
Sup. Fan Heat		100	600	5			RA Preheat			Ö			Cooling	Heating
Ret. Fan Heat		0	0	0:			Additional F			Ö		% OA	4.9	4.9
Duct Heat Pkup		0	0	0:			System Pler			485		cfm/ft²	1.33	1.33
Underfir Sup Ht P	kun	U	0	0:			Underfir Su			0		cfm/ton	438.45	
Supply Air Leaka		0	0	0:			Supply Air L			Ŏ		ft²/ton	329.26	
Supply Air Leaka	je	U	U	0		-	Supply Air L	.eakage			0.00	Btu/hr-ft²	36.45	-13.11
Grand Total ==>	7,177	2,786	11,079	100.00	6,724	100.00	Grand Total	==>	-2,812	-3,987	100.00	No. People	30.45	-13.11
		COOLING	COIL SELE	CTION		ĒÀ	7	-	AREAS	1	н	EATING COIL	SELECTIO	N
	Total Capacity		Coil Airflow		B/WB/HR	Leave	DB/WB/HR	G	ross Total	Glass	25.50		Coil Airflow	Ent L
	ton MBh	MBh	cfm	°F °F		F	°F gr/lb		100000	ft² (%)		MBh	cfm	°F
Main Clg	0.9 11.1	10.4	405	80.2 64.4	66.2	59.9 5		Floor	304		Main Htg	-4.0		67.4 76
Aux Clg	0.0	0.0	0	0.0 0.0	0.0		0.0 0.0	Part	0		Aux Htg	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 ExFir	0		Preheat	0.0	0	0.0 0
Total	0.9 11.1							Roof	304		Humidif	0.0	0	0.0
								Wall	128	102 80	Opt Vent	0.0	0	0.0
								Ext Door	0	0 0	Total	-4.0		
								EXI DOOL	v	3 3	rotar			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A06 PRESIDENTS OFFICE

	COOLING	COIL PEAK		c	CLG SPACE	PEAK			HEATING	COILP	EAK		TEM	PERATURE	S	
Pea	ked at Time: Outside Air:		Hr: 11 / 14 IR: 77 / 60 / 49	9 :	Mo/Hr: OADB:	12 / 14 73			Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 55.0 76.7		75.0 68.8
	Space	Plenum	Net	Percent	Space	Percent			Space Peak		oil Pask	Percent	Return	76.7		68.8
	Sens. + Lat.	Sens. + Lat		Of Total	Sensible	Of Total			Space Sens	- 65	Tot Sens		Ret/OA	76.7		68.3
	Btu/h	Btu/h	Btu/h	The state of the s	Btu/h	(%)			Btu/h		Btu/h		Fn MtrTD	0.1	ì	0.0
Envelope Loads	Diu/II	Dium	Diu/II	(%)	Blu/II	(70)	Envelope Loads		Diu/II		Diu/ii	(%)	Fn BldTD	0.3		0.0
Skylite Solar	0	0	0	0:	0	0	Skylite Solar		0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond	0	0	0	0:4	0	0.	Skylite Cond	- /	0		o		FILFILL	0.5		0.0
Roof Cond	0	1.359	1,359	5	o o	0	Roof Cond	- 40	0		-1.067					_
Glass Solar	23,943	0	23,943	80 ·	24.565	93	Glass Solar		0		0,000		Δ	IRFLOWS		
Glass/Door Con		0	52	0:	-300	-1	Glass/Door Co	ond	-2.760		-2.760					
Wall Cond	201	119	320	1:	143	1	Wall Cond		-314		-510			Cooling		ating
Partition/Door	0	885	0	0:	0	0:	Partition/Door		0		0		Diffuser	1,202		1,202
Floor	0		0	0:	0	0:	Floor		0		0		Terminal	1,202		1,202
Adjacent Floor	0	0	0	0:	0	0:	Adjacent Floor	r	0		0		Main Fan	1,202		1,202
Infiltration	78		78	0:	-45	0 :	Infiltration		-786		-786		Sec Fan	0		0
Sub Total ==>	24,273	1,478	25,751	86:	24,363	92	Sub Total ==>		-3,860		-5,122	57.82	Nom Vent	20		20
	- 1	110.000			- 11000	~ .					50,000	5 00,300,00,00	AHU Vent	20		20
Internal Loads						1	Internal Loads						Infil	24		24
	979	245	4 000	4	070	4	Links					0.00	MinStop/Rh	24		0
Lights	450	245	1,223 450	2	979 250	4	Lights People		0		0		Return	1,225		1,225
People Misc	771	0	771	3	771	3	Misc		0		0	200000000	Exhaust	1,225		44
		-		100					100				Rm Exh			0
Sub Total ==>	2,200	245	2,444	8	2,000	8	Sub Total ==>		0		0	0.00	Auxiliary	0		0
Ceiling Load	457	2	0	0	124		Ceiling Load		-114		0	0.00	Leakage Dwn	0		0
Ventilation Load	157	-157	66	0:			Ventilation Load		-114		-661			0		0
	0	0	A4-50510		0				0		-001	1,252,000	Leakage Ups	Ü		U
Adj Air Trans Hea	(r)		0	0:	0	0:	Adj Air Trans He	at	(378			2 3550				
Dehumid. Ov Siz			0	0 ;	7720		Ov/Undr Sizing		-2,648		-2,648		10.000000000000000000000000000000000000		avarant.	
Ov/Undr Sizing	0	-80	0 -80	0:	0	0 :	Exhaust Heat				58		ENGI	NEERING C	KS	
Exhaust Heat		-80	1,780	6:		- 1	OA Preheat Diff.				0			Cooling	Hea	ting
Sup. Fan Heat		0	1,780	0:			RA Preheat Diff.				0	0.00	% OA	1.7	Hea	1.7
Ret. Fan Heat Duct Heat Pkup		0	0	0:		4	Additional Rehea System Plenum				-485		cfm/ft²	4.05		4.05
Underfir Sup Ht I	Okum	U	0	0:			Underfir Sup Ht				0		cfm/ton	481.23		4.00
		0	0	0:		į.	Supply Air Leaka				0	2 23,000,000	ft²/ton	118.95		
Supply Air Leaka	ge	Ü	U	0		-	Supply Air Leaks	age				0.00	Btu/hr-ft²	100.88	20	9.83
Grand Total ==>	26,630	1,485	29,961	100.00	26,487	100.00	Grand Total ==>		-6,622		-8,858	100.00	No. People	1	-23	9.03
		COOLING	COIL SELE	CTION		ĒÀ	¥		AREAS	8		HE	ATING COIL	SELECTIO	N	=
	Total Capacity		Coil Airflow		B/WB/HR	Leave	DB/WB/HR	G	Fross Total	Glass		05.55		Coil Airflow	Ent	Lvg
	ton MBh	MBh	cfm	°F °F	gr/lb	°F	°F gr/lb		Towns .	ft ²	(%)		MBh	cfm	°F	°F
Main Clg	2.5 30.0	29.7	1,202	78.0 59.7	47.9	55.0 50	Carlo March 1 and	loor	297		110000	Main Htg	-8.9	1,202	68.3	75.0
Aux Clg	0.0 0.0	0.0	1,202		0.0			art	297			Aux Htg	0.0	1,202	0.0	0.0
									100							
Opt Vent	0.0 0.0	0.0	0	0.0 0.0	0.0	0.0	E	nt Door xFIr	0			Preheat	0.0	0	0.0	0.0
Total	2.5 30.0							Roof	297	0	0	Humidif	0.0	0	0.0	0.0
							14	Vall	304	149	49	Opt Vent	0.0	0	0.0	0.0
								vali	304	149	45	Obt vent	0.0	Ü	20000	100

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

TRACE® 700 v6.3 calculated at 02:46 PM on 12/05/2015 Alternative - 1 System Checksums Report Page 6 of 40

By ACADEMIC

A07 PRESIDENTS MEETING ROOM

	COOLING	COIL PEAK			CLG SPACE	PEAK			HEATING C	OIL PEAK		TEM	PERATURE	s	
Pea	ked at Time: Outside Air:		o/Hr: 9 / 16 /HR: 89 / 72 / 8	9 :	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating Design 40		SADB	Cooling 55.9		75.3
	Space	Plenum	Net	Percent	Space	Percent			Space Peak	Coil Boo	k Percent	Ra Plenum Return	82.9 82.9		66.9 66.9
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		s Of Total	Ret/OA	85.7		55.3
	Btu/h	Btu/h	Btu/h	The state of the s	Sensible Btu/h	Annual Control of the			Btu/h	Btu		Fn MtrTD	0.1		0.0
Envelope Loads	Diu/II	Dium	DIU/II	(%)	Dtu/II	(%)	Envelope Lo	Ada .	Diu/II	Blu	h (%)	Fn BldTD	0.3		0.0
Skylite Solar	0	0	0	0:	0	0	Skylite So		0		0.00	Fn Frict	0.9		0.0
Skylite Cond	0	0	0	0:/	0	0	Skylite Co		0		0.00	ritriict	0.0		0.0
Roof Cond	0	2,191	2,191	26	0	0	Roof Con		0	-1,00					- 6
Glass Solar	0	0	0	0.	0	0	Glass Sol		0		0.00	A	IRFLOWS		
Glass/Door Con	1 0	0	0	0:	0	0	Glass/Doo		0		0.00	5.0			
Wall Cond	0	0	0	0:	0	0			0		0.00		Cooling		eating
Partition/Door	0	93	0	0:	0	0	Partition/D	Door	0		0.00	Diffuser	186		186
Floor	0		0	0:	0	0	Floor		0		0.00	Terminal	186		186
Adjacent Floor	0	0	0	0:	0	0	Adiacent	Floor	0		0.00	Main Fan	186		186
Infiltration	768		768	9:	370	9	Infiltration	ri E	-794	-79	4 19.38	Sec Fan	0		0
Sub Total ==>	768	2,191	2,959	36	370	9	Sub Total	==>	-794	-1,80	0 43.95	Nom Vent	80		80
	(0.08000)	1000			17,0030	12.	14400000000000					AHU Vent	80		80
Internal Loads							Internal Loa	ds				Infil	24		24
Lights	1,682	420	2,102	25	1,682	43	Lights		0		0.00	MinStop/Rh	0		0
People	900	0	900	11	500	13	People		0		0.00	Return	210		210
Misc	445	0	445	5	449	12	Misc				0.00	Exhaust	104		104
				10.20		67	-	A., /	0			Rm Exh	0		0
Sub Total ==>	3,027	420	3,447	41	2,631	67	Sub Total	7-7	U		0.00	Auxiliary	0		0
Ceiling Load	754	-754	0	0	903	23	Ceiling Load		-295		0.00	Leakage Dwn	0		0
Ventilation Load	754	-754	2,559	31:	903	23	Ventilation L		233	-2,64		Leakage Ups	0		0
Adj Air Trans Hea	150	U	2,339	0:	0		Adj Air Tran		0		0 0	Leakage Ups	U		U
	N		200	2000	U	U			0		0 0.00				-
Dehumid. Ov Sizi Ov/Undr Sizing			0	0;			Ov/Undr Siz Exhaust Hea		U	35					
Exhaust Heat	0	-909	-909	0: -11	0	U	OA Preheat				0.00	ENGI	NEERING C	KS	
Sup. Fan Heat		-303	275	3:			RA Preheat				0.00		Cooling	Hea	ating
Ret. Fan Heat		0	0	0:			Additional R				0.00	% OA	43.1		43.1
Duct Heat Pkup		0	0	0:			System Pler				6 0.16	cfm/ft²	0.62		0.62
Underfir Sup Ht F	kun	•	o o	0:			Underfir Su				0.00	cfm/ton	267.39		2382
Supply Air Leaka		0	0	0:			Supply Air L				0.00	ft²/ton	432.14		
oupply All Leaks	30		v	٠.			Oupply All E	Leakage			0.00	Btu/hr-ft²	27.77	-1	3.65
Grand Total ==>	4,549	948	8,331	100.00	3,904	100.00	Grand Total	==>	-1,089	-4,09	6 100.00	No. People	4		5.00
		COOLING	COIL SELE	CTION		ĪÀ	7	1	AREAS		н	EATING COIL	SELECTIO	N	
	Total Capacity ton MBh	Sens Cap. MBh	Coil Airflow cfm		DB/WB/HR gr/lb	Leave	DB/WB/HR °F gr/lb		Gross Total	Glass ft ² (%)		Capacity MBh	Coil Airflow cfm	Ent °F	
Main Clg	0.7 8.3	6.3	186	87.1 68.4	75.7	55.9 5	4.2 60.7	Floor	300		Main Htg	-4.1	186	55.3	75.3
Aux Clg	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 ExFir	0		Preheat	0.0	0	0.0	0.0
Total	0.7 8.3							Roof	300	0 0	Humidif	0.0	0	0.0	0.0
								Wall	0	0 0	Opt Vent	0.0	0	0.0	0.0
								Ext Door	0	0 0	Total	-4.1			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A08 OFFICE

	C	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL F	PEAK		TEM	PERATURE	S	
1	Peaked a Outs	t Time: ide Air:		/Hr: 8 / 16 HR: 89 / 71 / 8	8	Mo/Hr: OADB:				Mo/Hr: H OADB:		Design		SADB Ra Plenum	Cooling 55.6 83.8		ting 75.5 66.9
		Space	Plenum	Net	Percent :	Space	Percent			Space Peak		Coil Peak	Percent	Return	83.8		66.9
	s	ens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens	Of Total	Ret/OA	85.1		59.3
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	7 4	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	ds		4.0			47		Envelope Lo	ads			7 7		Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0	Skylite So	lar	0		(0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		C		The Mark Market	500		2020
Roof Cond		0	972	972	33	0	0	Roof Cond	i	0		-396	31.37				
Glass Solar		0	0	0	0:	0	0	Glass Sola				0	0.00	A	IRFLOWS		
Glass/Door C	ond	0	0	0	0;	0	0	Glass/Doc		0		C			Cooling	Но	ating
Wall Cond		0	0	0	0:	0	0			0		C		Diffuser	70		70
Partition/Doo	r	0		0	0:	0	0	Partition/D	loor	0		C					538333
Floor		0		0	0:	0	0	Floor		0		C		Terminal	70 70		70 70
Adjacent Floo	or	0	0	0	0	0	0	Adjacent I	loor	0		C		Main Fan			
Infiltration		283		283	10 :	146	10	Infiltration		-312		-312		Sec Fan	0		0
Sub Total ==:	>	283	972	1,256	42:	146	10	Sub Total	==>	-312		-708	56.10	Nom Vent	20		20
								200						AHU Vent	20		20
Internal Loads								Internal Loa	ds					Infil	9		9
Lights		433	108	542	18:	433	29	Lights		0		0	0.00	MinStop/Rh	0		0
People		450	0	450	15	250	17	People		0		0	0.00	Return	80		80
Misc		315	0	315	11:	318	21	Misc		0		0	0.00	Exhaust	29		29
Sub Total ==:	>	1,199	108	1,307	44:	1,001	67	Sub Total	==>	0		0	0.00	Rm Exh	0		0
				15000		0.000	107						4 2500000	Auxiliary	0		0
Ceiling Load		329	-329	0	0:	355	24	Ceiling Load	1/	-116		C	0.00	Leakage Dwn	0		0
Ventilation Lo	ad	0	0	600	20:	0	0	Ventilation L	oad	0		-661	52.40	Leakage Ups	0		0
Adj Air Trans I	Heat	0		0	0:	0	0	Adj Air Trans	Heat	0		C	0				
Dehumid. Ov S	Sizina			0	0:			Ov/Undr Sizi	na	0		C	0.00	3.			
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Hea				101	-7.99	FNGIN	NEERING C	KS	
Exhaust Heat	=0		-286	-286	-10:	10.50		OA Preheat	Diff.			C	0.00	2.10.			
Sup. Fan Heat				104	3;			RA Preheat I	Diff.			C	0.00		Cooling	Hea	
Ret. Fan Heat			0	0	0:			Additional R				C		% OA	28.4		28.4
Duct Heat Pku	p		0	0	0:			System Plen				e	8 85215388	cfm/ft²	0.60	(0.60
Underflr Sup I	It Pkup			0	0			Underfir Su	Ht Pkup			C	2 93.0000000	cfm/ton	283.25		
Supply Air Lea	akage		0	0	0:			Supply Air L	eakage			C	0.00	ft²/ton	474.89		25350
						- Committee	A August				F		x Monteconsta	Btu/hr-ft ²	25.27	-10	0.70
Grand Total =:	=>	1,811	466	2,982	100.00	1,502	100.00	Grand Total	==>	-428		-1,262	100.00	No. People	1		eshe-c
			COOLING	COIL SELE	CTION		Ī À	7		AREAS			НЕ	ATING COIL	SELECTIO	N	
	Tota	al Capacity	Sens Cap.	Coil Airflow	Enter	DB/WB/HR	Leave	DB/WB/HR		Gross Total	Glass	s	05,55		Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm	°F °	F gr/lb	°F	°F gr/lb			ft²	(%)		MBh	cfm	°F	°F
Main Clg	0.3	3.0	2.3	70	86.5 67.	5 71.9	55.6 5	3.9 59.9	Floor	118			Main Htg	-1.3	70	59.3	75.5
Aux Clg	0.0	0.0	0.0	70				0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.0
				C					100000000000000000000000000000000000000	0					0		
Opt Vent	0.0	0.0	0.0		0.0 0.	0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	0.3	3.0							Roof	118	0	0	Humidif	0.0	0	0.0	0.0
iotai	0.5	3.0							Wall	0	0		Opt Vent	0.0	0	0.0	0.0
											0	0		-1.3	Ü	5.0	0.0
									Ext Door	U	U	U	Total	-1.3			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

TRACE® 700 v6.3 calculated at 02:46 PM on 12/05/2015 Alternative - 1 System Checksums Report Page 8 of 40

By ACADEMIC

A09 HALLWAY

	C	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL PEAK		TEM	PERATURE	s	
F	Peaked a Outs	t Time: ide Air:		o/Hr: 7 / 15 /HR: 89 / 70 / 8	11	Mo/Hr: OADB:				Mo/Hr: FOADB:	Heating Design 40	i	SADB	Cooling 60.0		75.0
	s	Space iens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peak	07/07/07/07	k Percent	Ra Plenum Return Ret/OA	82.3 82.3 82.3	6	67.3 67.3 67.3
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	Btu		Fn MtrTD	0.1		0.0
Envelope Load	ds	2.50	113		1.00	47	1,00	Envelope Lo	ads		7.0	1,00	Fn BldTD	0.3		0.0
Skylite Solar	1000	0	0	0	0:	0	0	Skylite So		0		0 0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		0 0.00		200		202
Roof Cond		0	9.724	9,724	50	0	0	Roof Con	d	0	-3,57	6 65.35				
Glass Solar		0	0	0	0;	0	0	Glass Sol	ar	0		0 0.00	A	IRFLOWS		
Glass/Door C	ond	0	0	0	0;	0	0	: Glass/Dod	or Cond	0		0.00		Cooling	Шл	ating
Wall Cond		0	0	0	0:	0	0		1	0		0.00	D.44	2012		A 100 00 7
Partition/Door	r:	0		0	0:	0	0		oor	0		0.00	Diffuser	647		647
Floor		0		0	0:	0	0	Floor		0		0.00	Terminal	647		647
Adjacent Floo	or	0	0	0	0	0	0	Adjacent	Floor	0		0.00	Main Fan	647		647
Infiltration		2,168		2,168	11 :	1,295	12	Infiltration		-2,775	-2,77		Sec Fan	0		0
Sub Total ==:	>	2,168	9,724	11,892	61:	1,295	12	; Sub Total	==>	-2,775	-6,35	1 116.06	Nom Vent	0		0
								Straw out					AHU Vent	0		0
Internal Loads								Internal Loa	ds				Infil	84		84
Lights		1.572	393	1,966	10	1,572	15	Lights		0		0 0.00	MinStop/Rh	0		0
People		0	0	0	0:	0	0	People		0		0 0.00	Return	731		731
Misc		5.370	o	5,370	28	5,370	50	Misc		5,370	5.37		Exhaust	84		84
Sub Total ==:		6.943	393	7,336	38	6,943	65	Sub Total	1	5,370	5,37		Rm Exh	0		0
Sub Iolai		0,543	353	7,330	30	0,543	00	Sub rotar		5,570	0,07	0 -36.13	Auxiliary	0		0
Ceiling Load		2.434	-2.434	0	0:	2.434	23	Ceiling Load		-889		0.00	Leakage Dwn	0		0
Ventilation Los	ad	0	0	o o	0:	0	0	Ventilation L		0		0 0.00	Leakage Ups	0		0
Adj Air Trans I	Heat	0		0	0:	0	0	Adj Air Tran		0		0 0	Lounage opo			~
Dehumid. Ov S				0	0:			Ov/Undr Siz		-5,272	-5,27	2 96.34	2			_
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Hea		0,2,2	24		ENGU	NEERING C	ve	
Exhaust Heat	9	v	-677	-677	-3			OA Preheat				0 0.00	LINGII	VELKING C	N.S	
Sup. Fan Heat				958	5:			RA Preheat	Diff.			0.00		Cooling	Heat	ting
Ret. Fan Heat			0	0	0:			Additional R				0.00	% OA	0.0		0.0
Duct Heat Pku	p		0	0	0:			System Plen	um Heat		53	3 -9.74	cfm/ft²	0.62	(0.62
Underflr Sup H	It Pkup			0	0:			Underfir Sup	Ht Pkup			0.00	cfm/ton	397.91		
Supply Air Lea	akage		0	0	0:			Supply Air L	.eakage			0.00	ft²/ton	645.26		
Grand Total ==	=>	11.545	7,005	19,508	100.00	10,672	100.00	Grand Total	==>	-3,565	-5.47	2 100.00	Btu/hr-ft² No. People	18.60	-5	5.22
		35	38	- 10			= A	Y <i>#</i>	-			1.				_
	124			COIL SELI					V	AREAS	V2-20070-00	Н	EATING COIL			200
		al Capacity	Sens Cap.	Coil Airflow		DB/WB/HR		DB/WB/HR	. 13	Gross Total	Glass			Coil Airflow	Ent	Lv
	ton	MBh	MBh	cfm	ı °F '	°F gr/lb	⊸°F	°F gr/lb	1000	56	ft ² (%)		MBh	cfm	°F	o
Main Clg	1.6	19.5	18.6	647	83.7 65	.4 65.5	60.0 5	5.6 59.6	Floor	1,049		Main Htg	-5.5	647	67.3	75.
Aux Clg	0.0	0.0	0.0	(0.0 0.0	Part	0		Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0	C	0.0 0	.0 0.0	0.0	0.0 0.0	Int Door	0		Preheat	0.0	0	0.0	0.
(4)			-						ExFlr	0				-		
Total	1.6	19.5							Roof	1,049	0 0	Humidif	0.0	0	0.0	0.
									Wall	0	0 0	Opt Vent	0.0	0	0.0	0.
									Ext Door	. 0	0 0	Total	-5.5			
									-A. 2001	255	10 M		3.0			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A10 HALLWAY

	CC	OLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL PE	AK		TEM	PERATURE	S	
P	Peaked at Outsid	1000		o/Hr: 7 / 15 /HR: 89 / 70 / 8	1	Mo/Hr: OADB:				Mo/Hr: I OADB:	Heating De 40	sign		SADB	Cooling 60.1		75.0
		Space	Plenum	Net	Percent	Space	Percent	:		Space Peak	0-11	D1	Percent	Ra Plenum Return	82.3 82.3		67.3 67.3
	Se	ns. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total					Sens		Ret/OA	82.3		67.3
	0.	Btu/h	Btu/h	Btu/h	The state of the s	Btu/h	10000000		7	Space Sens Btu/h	101	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	-	Btu/n	Biu/n	Btu/n	(%)	Btu/n	(%)	Envelope Lo		Btu/n		Blu/n	(%)	Fn BldTD	0.3		0.0
Skylite Solar	ıs	0	0	0	0	0	0	Skylite So		0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		ő		FILFILL	0.5		0.0
Roof Cond		0	1.186	1,186	48	0	0	Roof Con		0		-436					_
Glass Solar		0	0	0	0.	ő	ő	Glass Sol		0		0		Δ	IRFLOWS		
Glass/Door Co	ond	0	0	0	0:	0	0	Glass/Doc		0		0		50			
Wall Cond		0	0	0	0:	0	0			0		0			Cooling		eating
Partition/Door		0		ő	0:	o o	0			0		0		Diffuser	80		80
Floor		0		0	0:	0	0			0		0		Terminal	80		80
Adjacent Floo	r	0	0	0	0:	0	0	Adjacent	Floor	0		0		Main Fan	80		80
Infiltration		265		265	11	158	12			-339		-339		Sec Fan	0		0
Sub Total ==>		265	1,186	1,451	58:	158	12			-339		-775		Nom Vent	0		0
Gub rotar		200	1,100	1,401		100							52695550	AHU Vent	Ö		0
Internal Loads								Internal Loa	ds					Infil	10		10
		040		000		040							0.00	(00000000)	0		0
Lights		210	52	262	11 }	210	16	Lights		0		0		MinStop/Rh	80		80
People		0	0	0	0 :	0	0	People		0		0		Return	80		0
Misc		655	0	655	26	655	50	Misc		655		655		Exhaust	0		
Sub Total ==>		865	52	917	37	865	66	Sub Total	==>	655		655	-96.62	Rm Exh Auxiliary	0		0
Ceiling Load		297	-297	0	0	297	23	Ceiling Load		-108		0	0.00	Leakage Dwn	0		0
Ventilation Loa	d	0	-297	0	0:	0	23	Ventilation L		0		o		Leakage Ups	0		0
Adj Air Trans H	0000	0	U	0	0:	0		Adj Air Tran		0		0	157477777	Leakage Ups			0
Dehumid. Ov S		U		0	0	U	U	Ov/Undr Siz		-650		-650	2 2000				
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Hea		-030		-000		FNO	NEERING C	V0	
Exhaust Heat		U	0	0	0:	U	U	OA Preheat				0		ENGI	NEERING C	NS.	
Sup. Fan Heat			3	119	5:			RA Preheat				ō			Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional F				o		% OA	0.0		0.0
Duct Heat Pkup	0		0	0	0:			System Plen				92		cfm/ft²	0.63		0.63
Underfir Sup H			8700	0	0:			Underfir Su	Ht Pkup			0	0.00	cfm/ton	386.86		
Supply Air Lea			0	0	0:			Supply Air L				0		ft²/ton	617.54		
							/ A							Btu/hr-ft²	19.43	-	5.30
Grand Total ==	>	1,427	942	2,487	100.00	1,320	100.00	Grand Total	==>	-442		-678	100.00	No. People	0		
	578			COIL SELE			7 À			AREAS			HI	EATING COIL			
	Total ton	Capacity MBh	Sens Cap. MBh	Coil Airflow cfm		DB/WB/HR F gr/lb	Leave	°F gr/lb	137	Gross Total	Glass ft ² (9	6		Capacity MBh	Coil Airflow cfm	Ent °F	
Main Clg	0.2	2.5	2.4	80	83.7 65	6 5700	60.1 5		Floor	128	2003 65%	0.5	Main Htg	-0.7	80	67.3	75.
Aux Clg	0.0	0.0	0.0	C				0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0	C	0.0 0	0.0	0.0	0.0 0.0	Int Door				Preheat	0.0	0	0.0	0.
100 1220000	-	-							ExFlr	0	man.	, I	200000000000	002000		202	0.00
Total	0.2	2.5							Roof	128			Humidif	0.0	0	0.0	0.
									Wall	0		503	Opt Vent	0.0	0	0.0	0.
									Ext Door	. 0	0	0	Total	-0.7			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A11 WOMENS RESTROOM

	CC	OLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL PEAK		[]	TEM	PERATURE	s	
F	Peaked at Outsi	Time: de Air:	Mo/H OADB/WB/HF	r: 7/15 R: 89/70/8	1 :	Mo/Hr: OADB:				Mo/Hr: H OADB:	leating Desig 10	n		SADB	Cooling 60.4		ating 75.0
														Ra Plenum	81.1		67.8
		Space	Plenum	Net	Percent :	Space	Percent			Space Peak	Coil Pe	ak Perd	ent	Return	81.1		67.8
	Se	ns. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens	Tot Se	ns Of T	otal	Ret/OA	81.1		67.8
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		-	Btu/h	Bt	J/h	(%)	Fn MtrTD	0.1		0.0
Envelope Load	is							Envelope Lo						Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0	Skylite Sol		0			0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0			0.00				
Roof Cond		0	1,837	1,837	47	0	0	Roof Cond		0	-6		0.04				
Glass Solar		0	_ 0 _	0	0;	0	0 ;	Glass Sola		0			0.00	Α	IRFLOWS		
Glass/Door C	ond	0	0	0	0;	0	0 ;	Glass/Doo		0			0.00		Cooling	He	eating
Wall Cond		0	0	0	0:	0	0:	Wall Cond		0			0.00	Diffuser	125		125
Partition/Door	18	0		0	0:	0	0	Partition/D	oor	0			0.00	Terminal	125		125
Floor		0	020	0	0	0	0	Floor	<u> </u>	0			0.00	Main Fan	125		125
Adjacent Floo	r	0	0	0	0 ;	0	0	Adjacent F	loor	0	0.00		0.00				
Infiltration		398		398	10 :	241	12	Infiltration		-516	177		1.18	Sec Fan	0		0
Sub Total ==>	>	398	1,837	2,235	57:	241	12	Sub Total	==>	-516	-1,1	91 141	1.22	Nom Vent	0		0
								272 227	200				- 11	AHU Vent	0		0
Internal Loads					1			Internal Load	is				- 11	Infil	16		16
Lights		360	90	450	12:	360	18	Lights		0		0 (0.00	MinStop/Rh	0		0
People		0	0	0	0:	0	0	People		0		0 (0.00	Return	125		125
Misc		998	0	998	26	998	50	Misc		998	9	98 -118	3.40	Exhaust	0		0
Sub Total ==>	>	1,358	90	1,448	37	1,358	68	Sub Total	==>	998	c	98 -118	3.40	Rm Exh	21		21
oud rotal		1,000		.,	:	1,000					,5			Auxiliary	0		0
Ceiling Load		377	-377	0	0:	377	19	Ceiling Load	/	-139		0 (0.00	Leakage Dwn	0		0
Ventilation Loa	ad	0	0	0	0:	0	0	Ventilation L	oad	0		0 (0.00	Leakage Ups	0		0
Adi Air Trans H	leat	34		34	1.	34	2	Adj Air Trans	Heat	-34	7	34	4				
Dehumid. Ov S	Sizina	0.550		0	0:	-		Ov/Undr Sizi		-842	-8	42 99	9.91				_
Ov/Undr Sizing		0		o	0:	0	0	Exhaust Hea		140041651	5.763		0.00	ENGIN	NEERING C	KS	
Exhaust Heat	•		0	Ö	0:			OA Preheat I				0 (0.00	LIVOII	VELICINO C	INO.	
Sup. Fan Heat				185	5:			RA Preheat I	Diff.			0 (0.00		Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional R	eheat			0 (0.00	% OA	0.0		0.0
Duct Heat Pku	p		0	0	0:			System Plen	um Heat		2	26 -26	6.75	cfm/ft²	0.64		0.64
Underfir Sup H	lt Pkup			0	0:			Underfir Sup	Ht Pkup			0 (0.00	cfm/ton	383.78		
Supply Air Lea	kage		0	0	0			Supply Air L	eakage			0 (0.00	ft²/ton	599.68		
											-			Btu/hr-ft²	20.01	- 2	5.12
Grand Total ==	=>	2,167	1,550	3,902	100.00	2,010	100.00	Grand Total	==>	-533	-8	43 100	0.00	No. People	0		
			COOLING	OIL SELE	CTION		7 À	7		AREAS		1	HE	ATING COIL	SELECTIO	N	_
	Tota	Capacity	Sens Cap. C	oil Airflow	Enter I	B/WB/HR	Leave	DB/WB/HR		Gross Total	Glass				Coil Airflow	Ent	Lv
	ton	MBh	MBh	cfm	°F °F	gr/lb	°F	°F gr/lb	199	James 1	ft2 (%)			MBh	cfm	°F	
Main Clg	0.3	3.9	3.7	125	82.5 65.1	66.0	60.4 54	1.8 56.0	Floor	195	10.000 DESPEN	Main I	Uta	-1.0	125	67.8	75.0
Main Cig Aux Cig	0.0	0.0	0.0	0				0.0 0.0	Part	0		Aux H		0.0	0	0.0	0.0
				0					10000000			237 233	-		0		
Opt Vent	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	Int Door ExFir	0		Prehe	at	0.0	0	0.0	0.
Total	0.3	3.9							Roof	195	0 0	Humic	416	0.0	0	0.0	0.
rotar	0.5	5.5							Wall	0	0 0	Opt V		0.0	0	0.0	0.
									100000000000000000000000000000000000000	0		0.858.3398	CIIL		Ü	0.0	U.I
									Ext Door	U	0 0	Total		-1.0			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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A12 MENS RESTROOM

	С	OOLING C	OIL PEAK			CLG SPACE	PEAK		HEATING (COIL PEAK		TEM	PERATURE	s	
ſ	Peaked a Outs	it Time: iide Air:	Mo/Hr OADB/WB/HR	7/15 : 89/70/8	1	Mo/Hr: OADB:			Mo/Hr: OADB:	Heating Design 40		SADB Ra Plenum	Cooling 60.4 81.1		ting 75.0 67.8
		Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total		Space Peak Space Sens		Percent Of Total	Return Ret/OA	81.1 81.1	(67.8 67.8
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		Btu/h	Btu/f		Fn MtrTD	0.1		0.0
Envelope Load	is	2.30	///		1.07	47	1,00	Envelope Loads		7 7 7 7 7	1747	Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0	Skylite Solar	0		0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Cond	0		0.00				2020
Roof Cond		0	1,837	1,837	47	0	0	Roof Cond	0	-675	80.04				1
Glass Solar		0	_ 0 _	0	0:	0	0	Glass Solar			0.00	A	IRFLOWS		
Glass/Door C	ond	0	0	0	0;	0	0	Glass/Door Cond	0	(Cooling	Но	ating
Wall Cond		0	0	0	0:	0	0	Wall Cond	0	(0.00	Diffuser	125	110	125
Partition/Door	18	0		0	0:	0	0	Partition/Door	0	(0.00				
Floor		0		0	0:	0	0	Floor	0	(0.00	Terminal	125		125
Adjacent Floo	r	0	0	0	0;	0	0	Adjacent Floor	0	(Main Fan	125		125
Infiltration		398		398	10:	241	12	Infiltration	-516	-516		Sec Fan	0		0
Sub Total ==:	>	398	1,837	2,235	57:	241	12	Sub Total ==>	-516	-1,191	141.22	Nom Vent	0		0
												AHU Vent	0		0
Internal Loads								Internal Loads				Infil	16		16
Lights		360	90	450	12:	360	18	Lights	0	(0.00	MinStop/Rh	0		0
People		0	0	0	0:	0	0	People	0	(0.00	Return	125		125
Misc		998	0	998	26	998	50	Misc	998	998	-118.40	Exhaust	0		0
Sub Total ==:	>	1,358	90	1,448	37	1,358	68	Sub Total ==>	998	998	-118.40	Rm Exh	21		21
oud rotur		1,000		.,		1,000	1				110110	Auxiliary	0		0
Ceiling Load		377	-377	0	0:	377	19	Ceiling Load	-139	(0.00	Leakage Dwn	0		0
Ventilation Loa	ad	0	0	0	0:	0	0	Ventilation Load	0	(0.00	Leakage Ups	0		0
Adj Air Trans I	leat	34		34	1:	34	2	Adj Air Trans Heat	-34	-34	4	J			-
Dehumid. Ov S		0.000		0	0:		_	Ov/Undr Sizing	-842	-842	99.91				
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Heat		(ENGU	NEERING CI	/6	
Exhaust Heat		•	0	ŏ	ő:		v	OA Preheat Diff.		Ċ		LINGII	VEEKING CI	13	
Sup. Fan Heat				185	5:			RA Preheat Diff.					Cooling	Hea	ting
Ret. Fan Heat			0	0	0:			Additional Reheat		(0.00	% OA	0.0		0.0
Duct Heat Pku	p		0	0	0:			System Plenum Heat		226	-26.75	cfm/ft²	0.64	(0.64
Underfir Sup H				0	0:			Underfir Sup Ht Pkup	,	(0.00	cfm/ton	383.78		0.0000
Supply Air Lea	kage		0	0	0			Supply Air Leakage		(0.00	ft²/ton	599.68		
							. /					Btu/hr-ft²	20.01	-4	5.12
Grand Total ==	=>	2,167	1,550	3,902	100.00	2,010	100.00	Grand Total ==>	-533	-843	100.00	No. People	0		MA
			COOLING C	OIL SELE	CTION		Ī À	· 7 /=	AREAS	1	н	EATING COIL	SELECTIO	N	
	Tot	al Capacity		il Airflow		DB/WB/HR	Leave	DB/WB/HR	Gross Total	Glass			Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm	°F °	F gr/lb	°F	°F gr/lb []	and the same of th	ft ² (%)		MBh	cfm	°F	°F
Main Cla	0.3	3.9	3.7	125	82.5 65		60.4 5		195	2003 11989	Mala U4-	-1.0	125	67.8	75.0
Main Clg Aux Clg	0.0	0.0	0.0	125	5 10000000 700	100		0.0 0.0 Part	0		Main Htg Aux Htg	0.0	0	0.0	0.0
			~ 7.57												
Opt Vent	0.0	0.0	0.0	0	0.0 0.	0.0	0.0	0.0 0.0 Int Do	or 0 0		Preheat	0.0	0	0.0	0.0
Total	0.3	3.9						Roof	195	0 0	Humidif	0.0	0	0.0	0.0
100 a com	1000	00007110						Wall	0	0 0	Opt Vent	0.0	0	0.0	0.0
								Ext Do		0 0	Total	-1.0			discilla-
								EXID	, U	0 0	rotar	-1.0			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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A13 DIGITAL EDIT

	С	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL PEAR	K		TEM	PERATURE	s	
F	Peaked a Outs	t Time: ide Air:		/Hr: 8 / 16 HR: 89 / 71 / 8	18	Mo/Hr: OADB:				Mo/Hr: H OADB:	leating Desi 40	ign		SADB Ra Plenum	Cooling 59.2 80.3		75.0 68.0
		Space	Plenum	Net	Percent	Space	Percent	:		Space Peak	Coil F	Peak	Percent	Return	80.3		68.0
	8	ens. + Lat.	Sens. + Lat _	Total	Of Total	Sensible	Of Total			Space Sens	Tot S	17 TO S	537777.7777.777	Ret/OA	81.1		65.2
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h		stu/h	(%)	Fn MtrTD	0.1		0.0
Envelope Load	d-	Dium	Dium	Bian	(70)	Diam	(70)	Envelope Lo		Did/II		CU/II	(70)	Fn BldTD	0.3		0.0
Skylite Solar	us	0	0	0	0	0	0			0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		0	0.00	rii riict	0.9		0.0
Roof Cond		0	868	868	16	0	0	Roof Con		0		-349	16.16				_
Glass Solar		0	000	000	10.	0	0	Glass Sol		0		0	0.00		IRFLOWS		
Glass/Door C	and	0	0	0	0:	0	0			0		0	0.00	_ A			
Wall Cond	OHO	0	0	0	0:	0	0			0		0	0.00		Cooling	He	eating
Partition/Door		0	U	0	0:	0	0			0		0	0.00	Diffuser	200	100	200
	ES.	0		0	0:	0	0		1000	0		0	0.00	Terminal	200		200
Floor		0	•	0		0			Et					Main Fan	200		200
Adjacent Floo	or		0		0		0	Adjacent		0		0	0.00				
Infiltration		241		241	5:	123	4			-265		-265	12.24	Sec Fan	C		0
Sub Total ==>	>	241	868	1,109	21	123	4	: Sub Total	==>	-265	<.	614	28.41	Nom Vent	20		20
								lara sur	20					AHU Vent	20		20
Internal Loads								Internal Loa	ds					Infil	8	0	8
Lights		205	51	256	5:	205	6	Lights		0		0	0.00	MinStop/Rh	C	100	0
People		450	0	450	9:	250	7	People		0		0	0.00	Return	208	12	208
Misc		2,730	0	2,730	52	2.730	78			2,730	2	.730	-126.38	Exhaust	28		28
Sub Total ==>		3.385	51	3,436	65	3,185	91	Sub Total	A/	2,730		730	-126.38	Rm Exh		NO.	0
Sub Total		3,300	51	3,430	65	3,100	91	Sub Total	7-7	2,730	2	,730	-120.30	Auxiliary	Č		0
Ceiling Load		167	-167	0	0	182	5	Ceiling Load		-64		0	0.00	Leakage Dwn	Ċ		0
Ventilation Loa	ad	0	-167	602	11	0	0	Ventilation I		-04	100	-661	30.61		Č		0
		1500	0		100000	8 0076	- 5			0		0	0	Leakage Ups	3,0	99	U
Adj Air Trans F		0		0	0	0	0	Adj Air Tran		10.78	-		1870				
Dehumid. Ov S				0	0;			Ov/Undr Siz		-3,503	-3	,503	162.16	7,107,707,707		ALAN IN	
Ov/Undr Sizing	g	0	300	0	0:	0	0					62	-2.87	ENGI	NEERING C	KS	
Exhaust Heat			-163	-163	-3:			OA Preheat				0	0.00		Castina		
Sup. Fan Heat				296	6;			RA Preheat				0	0.00	0/ 04	Cooling		ating
Ret. Fan Heat			0	0	0:			Additional F				0	0.00	% OA	10.0		10.0
Duct Heat Pku			0	0	0:			System Pler			-	-174	8.07	cfm/ft²	2.00		2.00
Underfir Sup H	It Pkup			0	0			Underfir Su	p Ht Pkup			0	0.00	cfm/ton	454.09		
Supply Air Lea	akage		0	0	0:			Supply Air I	.eakage			0	0.00	ft²/ton	227.26		
										100	Z.,		NO CONTRACTOR OF THE PARTY OF T	Btu/hr-ft ²	52.80	-2	1.61
Grand Total ==	=>	3,794	588	5,280	100.00	3,490	100.00	Grand Total	==>	-1,101	-2	,160	100.00	No. People	1		
			COOLING	COIL SELI	ECTION		7 À	- 7		AREAS		71	HE	ATING COIL	SELECTIO	N	
	Total	al Capacity	Sens Cap.	Coil Airflow	Enter	DB/WB/HR	Leave	DB/WB/HR	100	Gross Total	Glass			Capacity	Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm		°F gr/lb	°F	°F gr/lb	1		ft ² (%)	ш		MBh	cfm	°F	
							FO 0 -		822	100	2005	- 11	2 (2002)			05.0	70.0
Main Clg	0.4	5.3	4.7	200			59.2 5		Floor	100			Main Htg	-2.2		65.2	75.0
Aux Clg	0.0	0.0	0.0	C		0.0		0.0 0.0	Part	0		- 11	Aux Htg	0.0	0	0.0	0.0
Opt Vent	0.0	0.0	0.0	C	0.0	0.0 0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	0.4	5.3							Roof	100	0 0		Humidif	0.0	0	0.0	0.0
	×.17	0.0							Wall	0	0 0	11	Opt Vent	0.0	0	0.0	0.0
									1000000		0 0	- 11	Total	-2.2	Ĭ.	2500	
									Ext Door	U	0 0		rotar	-2.2			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A14 SICK ROOM

	C	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL F	EAK		TEM	PERATURE	S	
1	Peaked a Outs	t Time: ide Air:		o/Hr: 8 / 16 /HR: 89 / 71 / 8	18	Mo/Hr: OADB:				Mo/Hr: I		Design		SADB	Cooling 55.0		5.0
		Space	Plenum	Net	Percent	Space	Percent	:		Space Peak	-	Coil Book	k Percent	Ra Plenum Return	80.3 80.3		0.88
	S	iens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total	1		Space Sens			of Total	Ret/OA	84.2		4.7
	~	Btu/h	Btu/h	Btu/h	The state of the s	Btu/h	1000000			Btu/h	7 /	Btu/h	The state of the s	Fn MtrTD	0.1		0.0
Envelope Load	4-	Btu/n	Biu/n	Btu/n	(%)	Btu/n	(%)	Envelope Lo	and a	Btu/n	/	Blu/f	1 (%)	Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0	0	0			0		// (0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0			12 mar. 11 mar.	FIIFICE	0.5		0.0
Roof Cond		0	868	868	36	0	0			0		-349					_
Glass Solar		o	000	000	0.	ő	ő	Glass Sol		0		0.0	0.00	Δ	IRFLOWS		
Glass/Door C	Cond	0	0	0	0:	ő	0			0		ò					
Wall Cond		0	0	0	0:	0	0			0		Ċ			Cooling		ating
Partition/Doo	or:	0	18	0	0:	0	0			0		Ċ		Diffuser	42		42
Floor		0		0	0:	0	0	Floor		0		(0.00	Terminal	42		42
Adjacent Floo	or	0	0	0	0:	0	0	Adjacent	Floor	0		(0.00	Main Fan	42		42
Infiltration		224		224	9	123	13	Infiltration		-265		-265	28.05	Sec Fan	0		0
Sub Total ==:	>	224	868	1,092	45:	123	13	: Sub Total	==>	-265		-614	65.07	Nom Vent	20		20
				1803300				100000000000000000000000000000000000000					A 0000000	AHU Vent	20		20
Internal Loads	s							Internal Loa	ds					Infil	8		8
Lights		205	51	256	11	205	22	Lights		0		(0.00	MinStop/Rh	0		0
People		450	0	450	19	250	27	People		0		Č		Return	50		50
Misc		171	o	171	7		18			171		17		Exhaust	28		28
Sub Total ==:	~	825	51	877	36	625	67	Sub Total	1	171		171		Rm Exh	0		0
Sub Total		020	51	0//	30	623	0/	Sub Total	7-1	171		17	1 -10.09	Auxiliary	0		0
Ceiling Load		167	-167	0	0:	182	20	Ceiling Load	1	-64		(0.00	Leakage Dwn	0		0
Ventilation Lo	ad	0	0	560	23	0	-0	Ventilation I		0		-661		Leakage Ups	0		0
Adj Air Trans I		0		0	0:	0	0	Adj Air Tran		0		(Lounage Ops			
Dehumid. Ov		o		0	0:			Ov/Undr Siz		-75		-75					_
Ov/Undr Sizin		0		0	0:	0	0	Exhaust He		0.1.00		62		ENGIN	IEERING C	VC	
Exhaust Heat		o	-163	-163	-7:	·	v	OA Preheat				(ENGIN	EEKING C	No	
Sup. Fan Heat				63	3:			RA Preheat				Ċ			Cooling	Heat	ing
Ret. Fan Heat			0	0	0:			Additional F	leheat			(0.00	% OA	47.4		7.4
Duct Heat Pku	up.		0	0	0:			System Pler	num Heat			174	1 -18.49	cfm/ft²	0.42	C	.42
Underfir Sup I	Ht Pkup			0	0:			Underfir Su	p Ht Pkup			(0.00	cfm/ton	208.74		
Supply Air Lea	akage		0	0	0			Supply Air I	.eakage			(0.00	ft²/ton	494.38		
							///				F .			Btu/hr-ft²	24.27	-6	9.43
Grand Total =:	=>	1,217	588	2,427	100.00	931	100.00	Grand Total	==>	-233		-943	3 100.00	No. People	1		10000
			COOLING	G COIL SELI	ECTION		7 À	- 7		AREAS			н	EATING COIL	SELECTIO	N	
		al Capacity	Sens Cap.	Coil Airflow		DB/WB/HR		e DB/WB/HR	137	Gross Total	Glass				Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm	°F	°F gr/lb	-°F	°F gr/lb			ft ²	(%)		MBh	cfm	°F	°F
Main Clg	0.2	2.4	1.9	42	85.5 68	3.3 77.6	55.0 4	9.3 43.5	Floor	100			Main Htg	-0.9	42	54.7	75.0
Aux Clg	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	Int Door				Preheat	0.0	0	0.0	0.0
Opt vent	0.0	0.0	0.0		0.0 (0.0	0.0	0.0	ExFir	0			rieneat	0.0	U	0.0	0.0
Total	0.2	2.4							Roof	100	0	0	Humidif	0.0	0	0.0	0.0
	0.2	5.70							Wall	0	0	ő	Opt Vent	0.0	0	0.0	0.0
									Ext Doo		0	0	Total	-0.9	Ĭ)	2590	200
									EXT DOO		U		, otal	-0.5			

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A15 STAFF LOUNGE

	C	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL F	PEAK		TEM	PERATURE	s	
P	eaked a Outs	it Time: side Air:		o/Hr: 7 / 16 /HR: 88 / 71 / 8	35	Mo/Hr: OADB:				Mo/Hr: OADB:		Design		SADB Ra Plenum	Cooling 57.3 83.5		75.0 66.7
		Space	Plenum	Net	Percent	Space	Percent	:		Space Peak		Coil Peak	Percent	Return	83.5		66.7
	S	ens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens	Of Total	Ret/OA	85.1		58.2
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	V A	Btu/h		Fn MtrTD	0.1		0.0
Envelope Loads	5	2.50	100		1.07	47	1,00	Envelope Lo	nads	A 70 A 70 A		/ 7/11	1,00	Fn BldTD	0.3		0.0
Skylite Solar	70	0	0	0	0	0	0			0		/ (0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0.	Skylite Co		0					- 300		202
Roof Cond		0	9.177	9,177	25	0	0	Roof Con		0		-3,481					_
Glass Solar		3,421	0	3,421	9.	3,421	19	Glass Sol		0		-		Α.	IRFLOWS		
Glass/Door Co	nd	873	0	873	2		5			-2.076		-2.076					
Wall Cond		1.952	428	2,381	7:	1.952	11	•		-1,859		-2,356			Cooling	1000	eating
Partition/Door		0	120	2,001	0:	0	0			0,000		2,000		Diffuser	945	3	945
Floor		Ö		0	0:	ő	0		2001	0		Č		Terminal	945	8	945
Adjacent Floor		0	0	0	0:	0	0	Adjacent	Floor	0		(Main Fan	945		945
Infiltration		2.381	U	2.381	7		7			-2.770		-2,770		Sec Fan	0	10	0
Sub Total ==>		8.628	9.605	18,233	50	7,484	41			-6,705		-10,683			300		
Sub rotar ==>		0,020	9,605	10,233	50	7,404	41	: Sub rotar		-0,703		-10,000	01.01	Nom Vent	25.55		300
								Internal Loa	do					AHU Vent	300		300
Internal Loads								internal Loa	us					Infil	84		84
Lights		1,995	499	2,494	7	1,995	/ /11	Lights		0		(MinStop/Rh	0		0
People		1,350	0	1,350	4	750	4	People		0		(Return	776		776
Misc		5,360	0	5,360	15:	5,360	29	Misc		5,360		5,360	-30.61	Exhaust	131		131
Sub Total ==>		8,706	499	9,204	25	8.106	44	Sub Total	==>	5,360		5,360	-30.61	Rm Exh	0	56	0
				307773						2/1000				Auxiliary	0		0
Ceiling Load		2,825	-2.825	0	0	2.825	15	Ceiling Load	1	-1,111		(0.00	Leakage Dwn	0	67	0
Ventilation Loa	d	0	0	8,529	24	0	0	Ventilation L	oad	0		-9,920	56.65	Leakage Ups	0	ri i	0
Adi Air Trans H	eat	0		0	0	0	0	Adj Air Tran		0		(Lounago opo			~
Dehumid. Ov Si		U		0	0			Ov/Undr Siz		-2,752		-2,752	15.72	-			_
Ov/Undr Sizing	zing	0		0	0	0	0			-2,752		485		FNO	NEERING C	V C	
Exhaust Heat		U	-1.232	-1,232	-3:	U	U	OA Preheat				400		ENGI	NEERING C	NS.	
Sup. Fan Heat			-1,232	1,400	4			RA Preheat				(Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional R				(% OA	31.7		31.7
Duct Heat Pkup			0	0	0:			System Plen				Č		cfm/ft²	0.90		0.90
Underfir Sup Hi			U	0	0			Underfir Su				Č	500000000000000000000000000000000000000	cfm/ton	313.84		0.00
			0	0	0								0 000000	ft²/ton	347.70		
Supply Air Leal	kage		U	U	0		7	Supply Air L	.eakage				0.00			- 2	0.70
Grand Total ==:	>	20,158	6,047	36,134	100.00	18,414	100.00	Grand Total	==>	-5,208		-17,510	100.00	Btu/hr-ft² No. People	34.51 15	-1	6.72
			COOLING	G COIL SELI	ECTION		ĒÀ	7 7		AREAS		1	HE	ATING COIL	SELECTIO	N	
	Tota	al Capacity	Sens Cap.	Coil Airflow		DB/WB/HR	Leave	DB/WB/HR	7	Gross Total	Glas	s I			Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm		°F gr/lb	°F	°F gr/lb	100		ft²	(%)		MBh	cfm	°F	
							F7.0 -		820	4.047	1000	4.557	2 (2000)			50.0	70.0
Main Clg	3.0	36.1	30.3	945			57.3 5		Floor	1,047			Main Htg	-17.5		58.2	75.0
Aux Clg	0.0	0.0	0.0	C		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	C	0.0	0.0 0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	3.0	36.1							Roof	1,047	0	0	Humidif	0.0	0	0.0	0.0
1000000	0								Wall	834	112		Opt Vent	0.0	0	0.0	0.0
									Ext Door		0	0	Total	-17.5	ő	2500	
									EXT DOOL	U	U	U	rotar	-17.5			

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A16 ELECTRICAL

	COOLING	COIL PEAK		(CLG SPACE	PEAK			HEATING C	OIL PEAK		TEM	PERATURE	s	
Pe	aked at Time: Outside Air:		o/Hr: 7 / 16 /HR: 88 / 71 / 8	5 ;	Mo/Hr: OADB:				Mo/Hr: I	Heating Design 40		SADB Ra Plenum	Cooling 59.9 82.8		75.0 67.1
	Space	Plenum	Net	Percent	Space	Percent	:		Space Peak	Coil Pag	k Percent	Return	82.8		67.1
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		s Of Total	Ret/OA	82.8		67.1
	Btu/h	Btu/h	Btu/h		Btu/h	(%)			Btu/h	Btu/		Fn MtrTD	0.1		0.0
Envelope Loads	Dium	Dium	Bitani	(%)	Bidail	(70)	Envelope Lo	ande	Did/II	Blu	(70)	Fn BldTD	0.3		0.0
Skylite Solar	0	0	0	0	0	0	Skylite Sc		0		0.00	Fn Frict	0.9		0.0
Skylite Cond	0	0	0	0:4	0	0	Skylite Co		0		0.00	riirriict	0.0		0.0
Roof Cond	0	1.000	1,000	41	0	0	Roof Con		0	-38					_
Glass Solar	0	0	0	0.	0	0	Glass Sol		0			A	IRFLOWS		
Glass/Door Cor	d 0	0	0	0:	0	0	Glass/Do		0		0.00				
Wall Cond	284	49	332	14:	284	19			-343	-42			Cooling		ating
Partition/Door	0	127	0	0:	0	0	Partition/[Door	0		0.00	Diffuser	88		88
Floor	0		0	0:	0	0	Floor		0	1.5	0.00	Terminal	88		88
Adjacent Floor	0	0	0	0:	0	0	Adjacent	Floor	0	19	0.00	Main Fan	88		88
Infiltration	258		258	11	134	9	Infiltration	l.	-299	-29	9 39.12	Sec Fan	0		0
Sub Total ==>	542	1.049	1,591	65:	417	29	Sub Total	==>	-642	-1,10	2 144.20	Nom Vent	0		0
			185500		100 100	200	10001000000			1674100		AHU Vent	0		0
Internal Loads							Internal Loa	ds				Infil	9		9
Lights	188	47	235	10	188	- 40	Links		0		0.00	MinStop/Rh	0		0
	100	0	235	0:	0	13	Lights		0		0.00	Return	97		97
People Misc	579	0	579	24	579	40	People		579	57		Exhaust	9/		9
		-		550					100			Rm Exh	9		0
Sub Total ==>	766	47	813	33	766	52	Sub Total	==>	579	57	9 -75.70		0		0
	72022	98000	1620		10000				100	10		Auxiliary	97.		
Ceiling Load	279	-279	0	0:	279	19	Ceiling Load		-103 0		0.00	Leakage Dwn	0		0
Ventilation Load	0	0	0	0:	0	0	Ventilation I					Leakage Ups	0		0
Adj Air Trans He	300		0	0:	0	0	Adj Air Tran		0		0 0				
Dehumid. Ov Siz			0	0;			Ov/Undr Siz		-318	-31					
Ov/Undr Sizing	0	122	_0	0:	0	0	Exhaust He			2		ENGI	NEERING C	KS	
Exhaust Heat		-78	-78	-3 :			OA Preheat				0.00		Cooling	Han	ting
Sup. Fan Heat		127	130	5;			RA Preheat				0.00	% OA	0.0	пеа	0.0
Ret. Fan Heat		0	0	0:			Additional F			4	0.00	cfm/ft²	0.78		0.78
Duct Heat Pkup		0	0	0:			System Pler					100000000000000000000000000000000000000		1	J.76
Underfir Sup Ht			0	0			Underfir Su				0.00	cfm/ton	429.79		
Supply Air Leaka	ge	0	0	0;		7	Supply Air I	Leakage			0.00	ft²/ton	551.93		20200
	4 500	739	2,457	400.00	1,463	400.00			-485	-76	400.00	Btu/hr-ft²	21.74	-	6.76
Grand Total ==>	1,588	739	2,457	100.00	1,463	100.00	Grand Total		-465	-/0	4 100.00	No. People	0		
		COOLING	COIL SELE	CTION		g A		/	AREAS		Н	EATING COIL	SELECTIO	N	
	Total Capacity	Sens Cap.	Coil Airflow	Enter D	B/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	T		ft2 (%)		MBh	cfm	°F	°F
Main Clg	0.2 2.5	2.3	88	84.2 65.5	65.5	59.9 5	6.5 63.7	Floor	113	2000 200000	Main Htg	-0.8	88	67.1	75.0
Aux Clg	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	Int Door	100		Preheat	0.0	0	0.0	0.0
Opt vent	0.0	0.0	U	0.0 0.0	0.0	0.0	0.0	ExFIr	0		rreneat	0.0	U	0.0	0.0
Total	0.2 2.5							Roof	113	0 0	Humidif	0.0	0	0.0	0.0
IOIAI	0.2 2.5							Wall	113	0 0	Opt Vent	0.0	0	0.0	0.0
								120000000000000000000000000000000000000		0.765	100 A		U	0.0	0.0
								Ext Door	. 0	0 0	Total	-0.8			

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A17 WOMENS RESTROOM

COOLING COIL PEAK					CLG SPACE	PEAK			HEATING	COIL PEAK	TEMPERATURES				
Pe	aked at Time:		Mo/Hr: 7 / 15		Mo/Hr:		:			Heating Design			Cooling	Heating	
	Outside Air:	OADB/M	/B/HR: 89 / 70 / 8	31	OADB:	89	:		OADB:	40		SADB	62.0	75.0	
												Ra Plenum	81.1	67.8	
	Spac			Percent	Space	Percent	•		Space Peak		Percent	Return	81.1	67.8	
	Sens. + La	t. Sens. + La	t Total	Of Total	Sensible	Of Total			Space Sens	Tot Sens	Of Total	Ret/OA	81.1	67.8	
	Btu/	h Btu//	n Btu/h	(%)	Btu/h	(%)			Btu/h	Btu/h	1 (%)	Fn MtrTD	0.1	0.0	
Envelope Loads			7 4		47		Envelope Lo	oads			1	Fn BldTD	0.3	0.0	
Skylite Solar		0 (0 0	0:	0	0	Skylite So	olar	0		0.00	Fn Frict	0.9	0.0	
Skylite Cond		0	0 0	0:	0	0	Skylite Co	ond /	0		0.00		200	(6)33	
Roof Cond		0 1.83	7 1,837	15	0	0	Roof Con	d	0	-675	9.19				
Glass Solar	5,73	2	5,732	46	5,732	59	Glass Sol	ar	0		0.00	A	RFLOWS		
Glass/Door Con	d 1,37	1 (0 1,371	11	1,371	14	Glass/Doo	or Cond	-3,342	-3,342	45.53		0	Headle	
Wall Cond	20	3 12	3 326	3:	203	2	: Wall Cond	d	-265		6.36		Cooling		
Partition/Door		0	0	0:	0	0	: Partition/E	Door	0	(0.00	Diffuser	679	67	
Floor		0	0	0;	0	0	Floor		0	(0.00	Terminal	679		
Adjacent Floor		0 (0 0	0:	0	0	Adjacent	Floor	0	(0.00	Main Fan	679	67	
Infiltration	40		409	3:	241	2			-516	-516		Sec Fan	0	10	
Sub Total ==>	7,71			77:	7,547	77			-4,123			Nom Vent	0		
Sub Iolai>	7,7.1	3 1,300	3,073	11	7,547		: Out rotal		1,120	1,000		AHU Vent	0		
a.v							Internal Loa	de				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			
Internal Loads							1	us				Infil	16		
Lights	26			3	266	3	Lights		0			MinStop/Rh	0		
People		0 (0	0	0	People		0			Return	679		
Misc	99	8 (998	8:	998	10	Misc		998	998	-13.60	Exhaust	0		
Sub Total ==>	1,26	5 6	7 1,331	11	1,265	13	Sub Total	==>	998	998	-13.60	Rm Exh	100	10	
	1050		150000		Occupa-							Auxiliary	0		
Ceiling Load	37	7 -377	7 0	0:	377	4	Ceiling Load	d /	-139	(0.00	Leakage Dwn	0	ij.	
Ventilation Load		0 (0	0	0	0	Ventilation L	oad	0	(0.00	Leakage Ups	0	67	
Adj Air Trans He	at 55	R	558	4:	558	6	Adj Air Tran	s Heat	-558	-558	3 8				
Dehumid. Ov Siz	907	~(1)	0	0:	000		Ov/Undr Siz		-1,831	-1.831					
Ov/Undr Sizing		0	0	0:	0	0	Exhaust Hea		1,001	(ENCIN	IEERING C	VC.	
Exhaust Heat			0 0	0:	U	U	: OA Preheat	N7.2		Č		ENGIN	EERING C	NS.	
Sup. Fan Heat		9	1.006	8:			RA Preheat			ò			Cooling	Heating	
Ret. Fan Heat		1	0 0	0:			Additional F			Č		% OA	0.0	0.0	
Duct Heat Pkup			0 0	0:			System Plen			-950		cfm/ft²	3.48	3.48	
Underfir Sup Ht I	Pkun	8	0	0:			Underfir Su			(cfm/ton	648.18		
Supply Air Leaka		9	0 0	0:			Supply Air L					ft²/ton	186.15		
Supply Air Leaka	ige	1		0		-	Supply Air L	eakage			0.00	Btu/hr-ft²	64.46	-27.84	
Grand Total ==>	9,91	5 1,649	9 12,570	100.00	9,746	100.00	Grand Total	==>	-5,653	-7,340	100.00	No. People	04.46	-27.04	
		COOLIN	NG COIL SELI	ECTION		ĒÀ	7 7	-	AREAS	1	Н	EATING COIL	SELECTIO	N	
	Total Capacit				DB/WB/HR	Leave	DB/WB/HR	G	ross Total	Glass			Coil Airflow	Ent L	
	ton MB				F gr/lb	°F	°F gr/lb		1	ft² (%)		MBh	cfm	°F	
Main Clg	1.1 12.				£ 5000	62.0 5		Floor	195	2000 00000	Main Htg	-5.4		67.8 75	
Aux Clg	0.0 0.			1.5 VO 0.000 VO			0.0 0.0	Part	0		Aux Htg	0.0	0	0.0	
Opt Vent	0.0 0.						0.0 0.0	Int Door	0		Preheat	0.0	0	0.0	
ii waxa	1202							ExFir	0			7,474			
Total	1.1 12.	b						Roof	195	0 0	Humidif	0.0	0	0.0	
								Wall	325	181 56	Opt Vent	0.0	0	0.0	
								Ext Door	0	0 0	Total	-5.4			

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A18 MENS RESTROOM

	COOLING COIL PEAK					CLG SPACE	PEAK			HEATING (TEMPERATURES					
Pe		at Time: side Air:		o/Hr: 8 / 15 /HR: 89 / 70 / 8	3	Mo/Hr: OADB:		:		Mo/Hr: OADB:	Heating De 40	esign		SADB Ra Plenum	Cooling 62.1 80.9		75.0 67.8
		Space Sens. + Lat. Btu/h	Plenum Sens. + Lat Btu/h	Net Total Btu/h	Percent Of Total (%)	Space Sensible Btu/h	Percent Of Total (%)			Space Peak Space Sens Btu/h	37,573		Percent Of Total (%)	Return Ret/OA Fn MtrTD	80.9 80.9 0.1		67.8 67.8 0.0
Envelope Loads		Diam	Diditi	, Diam	(10)		(10)	Envelope L	oads			Diam	(70)	Fn BldTD	0.3		0.0
Skylite Solar	70	0	0	0	0:	0	0			0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		o o		1.10.110.1			202
Roof Cond		0	1.618	1,618	28	0	0	Roof Con		0		-640	24.00				
Glass Solar		0	0	0	0:	0	0	: Glass So	lar	0		0	0.00	A	IRFLOWS		
Glass/Door Co	nd	0	0	0	0;	0	0	Glass/Do	or Cond	0		0	0.00		Cooling		a a time
Wall Cond		1,278	274	1,552	27:	1,397	38	Wall Con-	d	-930		-1,145	42.93		-		eating
Partition/Door		0		0	0:	0	0	: Partition/l	Door	0		0	0.00	Diffuser	261		261
Floor		0		0	0:	0	0	Floor		0		0	0.00	Terminal	261		261
Adjacent Floor		0	0	0	0:	0	0	Adjacent	Floor	0		0	0.00	Main Fan	261		261
Infiltration		402		402	7:	235	6	Infiltration	1	-489		-489	18.34	Sec Fan	0		0
Sub Total ==>		1.680	1,891	3,571	62:	1,632	44	Sub Total	==>	-1,420		-2,275	85.26	Nom Vent	0		0
		1114-715-710	INMEDIAL	45.500		0.57.0.71		100000000000000000000000000000000000000						AHU Vent	0		0
Internal Loads								Internal Loa	ids					Infil	15		15
Lights		253	63	316	5	253	7	: Lights		0		0	0.00	MinStop/Rh	0		0
People		253	0	0	0:	253	0			0		0		Return	261		261
Misc		947	0	947	16	947	26			947		947	-35.49	Exhaust	0		0
					10.73					100				Rm Exh	100		100
Sub Total ==>		1,200	63	1,263	22	1,200	32	Sub Total	(==>	947		947	-35.49		0		0
0		12.2	7272	1629		(-17.	0		400		0	0.00	Auxiliary	0		1701
Ceiling Load	20	345	-345	0	0:	309	8			-132 0		0	0.00	Leakage Dwn			0
Ventilation Load		0	0	0	0;	0	0	Ventilation		10.733				Leakage Ups	0		0
Adj Air Trans He		563		563	10	563	15	Adj Air Tran		-563		-563	21				
Dehumid. Ov Si	zing			0	0;			Ov/Undr Siz		-852		-852	31.95	31			
Ov/Undr Sizing		0	12	0	0:	0	0					0		ENGIN	IEERING CI	KS	
Exhaust Heat			0	0	0;			OA Preheat				0			Castina	U.	ating
Sup. Fan Heat			120	386	7:			RA Preheat				0		% OA	Cooling 0.0	неа	0.0
Ret. Fan Heat			0	0	0:			Additional F				0 76			1.41		
Duct Heat Pkup			0	0	0 :			System Ple					-2.83	cfm/ft²			1.41
Underfir Sup Ht				0	0 :			Underfir Su				0		cfm/ton	540.86		
Supply Air Leak	age		0	0	0;		72	Supply Air	Leakage	7		0	0.00	ft²/ton	383.86		760565
Grand Total ==>	•	3,788	1,609	5,783	100.00	3,705	100.00	Grand Total	==>	-2,021		-2,668	100.00	Btu/hr·ft² No. People	31.26 0	-1	11.27
			COOLING	G COIL SELE	CTION		Ī À	7		AREAS			н	EATING COIL	SELECTIO	N	_
	To	tal Capacity MBh	Sens Cap. MBh	Coil Airflow		*B/WB/HR *F gr/lb	Leave	°F gr/lb		Gross Total	Glass ft² (%)		Capacity MBh	Coil Airflow cfm	Ent °F	
Main Clg	0.5	5.8	5.6	261	82.2 64	A 17/10/20	62.1 5		Floor	185	2000	2007	Main Htg	-2.1	261	67.8	75.
Aux Clg	0.0		0.0	201		0.0		0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.0
	0.0		0.0	C		0.0		0.0 0.0	Int Door			- 11	Preheat	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0		0.0 0	0.0	0.0	0.0		0			rreneat	0.0	U	0.0	U.
Total	0.5	5.8							ExFIr Roof	185	0	0	Humidif	0.0	0	0.0	0.0
iotai	0.5	5.0							Wall	347	0		Opt Vent	0.0	0	0.0	0.0
									100000000000000000000000000000000000000			583			Ü	0.0	0.0
									Ext Door	. 0	0	0	Total	-2.1			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A19 CO-ED LOCKERS

		CLG SPACE	PEAK			HEATING (COIL PEAK	TEMPERATURES							
Pea	ked at Time: Outside Air:		o/Hr: 9 / 15 8/HR: 90 / 71 / 8	3	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating Design 40		SADB	Cooling 60.9	7	75.0
	Space	Plenum	Net	Percent	Space	Percent			Space Peak	Coil Peal	Percent	Ra Plenum Return	80.4 80.4		67.8 67.8
	Sens. + Lat		Total	Of Total	Sensible	Of Total			Space Sens	Tot Sen		Ret/OA	80.4		67.8
	Btu/f		Btu/h	(%)	Btu/h	(%)			Btu/h	Btu/l		Fn MtrTD	0.1	- 1	0.0
Envelope Loads	Diun	Dium	Bian	(70)	Diam	(70)	Envelope Lo	ade	Did/II	Blun	(70)	Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0	0	Skylite So		0		0.00	Fn Frict	0.9		0.0
Skylite Cond	í		0	0:/	0	0	Skylite Co		0			THITTIEL	0.0		0.0
Roof Cond	Ċ		930	30	o o	0	Roof Con		0	-39					
Glass Solar	į.		0	0.	0	0	Glass Sol		0		0.00	A	IRFLOWS		
Glass/Door Con-			0	0:	0	0	Glass/Doo		0		0.00				
Wall Cond	533	122	655	21:	533	28			-260	-320			Cooling		ating
Partition/Door	()	0	0:	0	0	: Partition/E	Door	0		0.00	Diffuser	124		124
Floor	()	0	0:	0	0	Floor		0	1.0	0.00	Terminal	124		124
Adjacent Floor	(0	0	0:	0	0	Adjacent	Floor	0	-	0.00	Main Fan	124		124
Infiltration	258	3	258	8:	151	8	Infiltration		-302	-30	2 26.08	Sec Fan	0		0
Sub Total ==>	79	1.052	1,843	59:	684	35	Sub Total	==>	-562	-1,010	87.90	Nom Vent	0		0
	(0.7672)		18-500-50		17.8/11	18381	1469 (2003)					AHU Vent	0		0
Internal Loads							Internal Loa	ds				Infil	9		9
Lights	198	49	247	8	198	10	Lights		0	- 1	0.00	MinStop/Rh	0		0
People	130		0	0:	0	0	People		0		0.00	Return	124		124
Misc	584		584	19	584	30	Misc		584	584		Exhaust	0		0
				0.20				A . /	100			Rm Exh	50		50
Sub Total ==>	782	9 49	831	27	782	40	Sub Total	==>	584	58-	-50.48	Auxiliary	0		0
Ceiling Load	195	-195	0	0	195	10	Ceiling Load		-81		0.00	Leakage Dwn	0		0
Ventilation Load	193		0	0:	0	10	Ventilation L		0		0.00	Leakage Ups	0		0
Adj Air Trans Hea			270	9:	270		Adj Air Tran		-270	-27		Leakage Ups	U		U
	fine particular	No.	1000000	75.00	2/0	14			-518	-51		L			
Dehumid. Ov Sizi Ov/Undr Sizing		S1	0	0:			Ov/Undr Siz		-516		0.00				
Exhaust Heat		, ,	0	0:	0	U	OA Preheat				0.00	ENGIN	IEERING C	KS	
Sup. Fan Heat		Ü	184	6;			RA Preheat				0.00		Cooling	Hea	tina
Ret. Fan Heat		0	0	0:			Additional R					% OA	0.0		0.0
Duct Heat Pkup		0	0	0:			System Pler			6		cfm/ft²	1.09		1.09
Underfir Sup Ht F	kun	U	0	0:			Underfir Su			Ĩ,		cfm/ton	475.64		
Supply Air Leaka		0	0	0:			Supply Air L					ft²/ton	437.35		
Supply All Leaka	je.	U	U	٠:			Supply All L	eakage			0.00	Btu/hr-ft²	27.44		8.70
Grand Total ==>	2,037	907	3,128	100.00	1,931	100.00	Grand Total	==>	-848	-1,15	100.00	No. People	0		5.70
		COOLIN	G COIL SELE	CTION		ĒÀ	7		AREAS		н	EATING COIL	SELECTIO	N	
	Total Capacity ton MBI		Coil Airflow cfm		DB/WB/HR F gr/lb	Leave	DB/WB/HR °F gr/lb	6	Gross Total	Glass ft² (%)		Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Clg	0.3 3.1		124			60.9 5		Floor	114		Main Htg	-1.0		67.8	75.0
Aux Clg	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	Int Door ExFir	0		Preheat	0.0	0	0.0	0.0
Total	0.3 3.1							Roof	114	0 0	Humidif	0.0	0	0.0	0.
								Wall	97	0 0	Opt Vent	0.0	0	0.0	0.0

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By ACADEMIC

A20 SHOWER

	c	LG SPACE	PEAK			HEATING C	OIL PEAK		TEMI	PERATURE	s				
Pea	ked at Time: Outside Air:		/Hr: 7 / 15 HR: 89 / 70 / 8	ı į	Mo/Hr: OADB:				Mo/Hr: H OADB:	leating Design 40		SADB Ra Plenum	Cooling 60.5 81.1		75.0 67.8
	Cooss	Plenum	Net	Percent	Space	Percent	:		Space Peak	Call Basi	Percent	Return	81.1		67.8
	Space Sens. + Lat.	Sens. + Lat _					:		573.1750 N. W.			Ret/OA	81.1		67.8
		151100 TENEDON STORY	Total	Of Total	Sensible	Of Total			Space Sens		Of Total	Fn MtrTD	0.1		0.0
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		A	Btu/h	Btu/f	1 (%)	Fn BldTD	0.1		0.0
Envelope Loads Skylite Solar	0	0	0	0:	0	0	Skylite Sol		0		0.00	Fn Frict	0.9		0.0
Skylite Solar Skylite Cond	0	0	0	0:/	0	0	Skylite Soi		0			Fn Frict	0.9		0.0
Roof Cond	0	942	942	42	0	0	Roof Cond		0	-346					
Glass Solar	0	0	0	70.	0	0	Glass Sola		0			Δ.	RFLOWS		
Glass/Door Con		0	0	0:	0	0	Glass/Doo		0			^			
Wall Cond	, 0	0	0	0:	0	0			0	Č			Cooling	He	ating
Partition/Door	0		0	0:	Ö	0			0	Č		Diffuser	79		79
Floor	o o		ő	0:	o	o		001	0	Č		Terminal	79		79
Adjacent Floor	0	0	0	0:	0	0	Adjacent F	loor	0	i		Main Fan	79		79
Infiltration	206	U	206	9:	123	10	Infiltration	1001	-265	-265		Sec Fan	0		0
Sub Total ==>	206	942	1.148	51:	123	10	Sub Total	==>	-265	-61		Nom Vent	0		0
Sub Total>	200	342	1,140	31:	123	10	Cub rotar		200	0,	00.02	AHU Vent	0		0
Internal Loads							Internal Load	is				Infil	8		8
	450	20	400	. :	450							(2007)	0		0
Lights	152	38	190 0	8:	152	12	Lights People		0	(MinStop/Rh Return	79		79
People	The second second	0	512	23	512	41	Misc		512			Exhaust	79		0
Misc	512	-		157.0			100	. /		512		0.000	50		50
Sub Total ==>	664	38	702	31	664	53	Sub Total :	==>	512	512	-75.05	Rm Exh	0		0
		1000	100	_:					74	(0.00	Auxiliary	0		0
Ceiling Load	193	-193	0	0:	193	15	Ceiling Load Ventilation Lo		-71 0		2 2723773	Leakage Dwn	25		
Ventilation Load	0	0	0	0:	0	0			-278	-278		Leakage Ups	0		0
Adj Air Trans Hea	71		278	12	278	22	Adj Air Trans								
Dehumid. Ov Sizi			0	0;	7740		Ov/Undr Sizi		-384	-384		30.00.000000000000000000000000000000000		NA. 657	
Ov/Undr Sizing	0		0	0:	0	0	Exhaust Hea			(ENGIN	IEERING C	KS	
Exhaust Heat		0	0 117	0:			OA Preheat D				0.00000000		Cooling	Hoa	ting
Sup. Fan Heat		0	0	5; 0:			RA Preheat D					% OA	0.0	1164	0.0
Ret. Fan Heat		0	0	0:			Additional Res			79		cfm/ft²	0.79		0.79
Duct Heat Pkup Underfir Sup Ht F	Love .	U	0	0:			Underfir Sup			6		cfm/ton	422.14		0.73
		0	0	0:							2 37.57.50	ft²/ton	534.71		
Supply Air Leaka	ge	U	U	0			Supply Air L	eakage			0.00	100000000000000000000000000000000000000			
Grand Total ==>	1,341	787	2,244	100.00	1,258	100.00	Grand Total	==>	-486	-682	100.00	Btu/hr-ft² No. People	22.44	-	6.31
		COOLING	COIL SELE	CTION		ĒÀ	7 7		AREAS	1	Н	EATING COIL	SELECTIO	N	
	Total Capacity ton MBh		Coil Airflow cfm		B/WB/HR gr/lb	Leave °F	DB/WB/HR °F gr/lb	G	Gross Total	Glass ft² (%)			Coil Airflow cfm	Ent °F	Lvg °F
Main Clg	0.2 2.2	2.2	79	82.5 65.0	65.7	60.5 5	5.8 59.5	Floor	100	2000 10000A	Main Htg	-0.6	79	67.8	75.0
Aux Clg	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 ExFir	0		Preheat	0.0	0	0.0	0.0
Total	0.2 2.2							Roof	100	0 0	Humidif	0.0	0	0.0	0.0
								Wall	0	0 0	Opt Vent	0.0	0	0.0	0.0
								Ext Door	0	0 0	Total	-0.6			

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A21 JANITOR CLOSET

COOLING COIL PEAK						CLG SPACE	PEAK		HEATING C	OIL PEAR		TEMPERATURES					
ı	Peaked a Outs	at Time: side Air:		/Hr: 7 / 15 HR: 89 / 70 / 8	11	Mo/Hr: OADB:				Mo/Hr: H OADB:	Heating Desi 40	gn		SADB	Cooling 60.3		75.0
		Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peak	(77) (71)	2000	Percent Of Total	Ra Plenum Return Ret/OA	81.1 81.1 81.1		67.8 67.8 67.8
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h		tu/h	(%)	Fn MtrTD	0.1		0.0
Envelope Load	ds	2.50 mm/s/s	40		1707	47	1,00	Envelope Lo	oads				1101	Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0	Skylite So	lar	0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co	ond /	0		0	0.00		200		(6)(5)
Roof Cond		0	499	499	50	0	0	Roof Con	d	0		183	87.50				
Glass Solar		0	0	0	0;	0	0	Glass Sol				0	0.00	A	IRFLOWS		
Glass/Door C	Cond	0	0	0	0;	0	0	; Glass/Dod		0		0	0.00		Cooling	Не	eating
Wall Cond		0	0	0	0:	0	0			0		0	0.00	Diffuser	32		32
Partition/Door	r	0		0	0:	0	0		Door	0		0	0.00				
Floor		0		0	0:	0	0			0		0	0.00	Terminal	32 32		32 32
Adjacent Floo	or	0	0	0	0	0	0	Adjacent		0		0	0.00	Main Fan			
Infiltration		108		108	11 :	65	13	Infiltration		-140		140	66.88	Sec Fan	0		0
Sub Total ==:	>	108	499	608	61:	65	13	Sub Total	==>	-140		324	154.37	Nom Vent	0	200	0
								1777 2927	441					AHU Vent	0)	0
Internal Loads	5							Internal Loa	ds					Infil	4		4
Lights		80	20	101	10	80	15	Lights		0		0	0.00	MinStop/Rh	0)	0
People		0	0	0	0:	0	0	People		0		0	0.00	Return	36	,	36
Misc		271	0	271	27	271	52	Misc		271		271	-129.43	Exhaust	4	ks:	4
Sub Total ==:	>	352	20	372	37	352	68	Sub Total	==>	271		271	-129.43	Rm Exh	0		0
Ceiling Load		103	-103	0	0:	103	20	Ceiling Load		-38		0	0.00	Auxiliary Leakage Dwn	0		0
Ventilation Los	ad	0	0	o o	0:	0	0	Ventilation L		0		0	0.00	Leakage Ups	0		0
Adj Air Trans I	Heat	0		0	0:	0	0	Adj Air Tran		0		0	0	Lounago opo			~
Dehumid. Ov S		· ·		0	0:			Ov/Undr Siz		-223		223	106.50	S.			
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Hea		220		11	-5.03	ENGU	NEERING C	VC	
Exhaust Heat	3	•	-29	-29	-3			OA Preheat				0	0.00	LINGII	VEEKING C	N.S	
Sup. Fan Heat			200	47	5			RA Preheat				0	0.00		Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional R				0	0.00	% OA	0.0		0.0
Duct Heat Pku	ıp		0	0	0:			System Plen	num Heat			55	-26.42	cfm/ft²	0.60		0.60
Underfir Sup H				0	0:			Underfir Sup	p Ht Pkup			0	0.00	cfm/ton	385.26		
Supply Air Lea	akage		0	0	0			Supply Air L	.eakage			0	0.00	ft²/ton	637.03		
Grand Total ==	=>	562	388	998	100.00	520	100.00	Grand Total	==>	-130		210	100.00	Btu/hr-ft² No. People	18.84	-	4.84
			COOLING	COULCEL	CTION		Ħ A	$\forall \neq$	\vdash	ADEAG		71	310	ATING COIL	CEL ECTIO	KI .	
		-1 01		COIL SELE		DDAMBAD	7	DDAWDUG	4. 7	AREAS	Class		н	EATING COIL			200
	ton	al Capacity MBh	Sens Cap. MBh	Coil Airflow cfm		DB/WB/HR F gr/lb	°F	°F gr/lb	19	Gross Total	Glass ft ² (%)	Ш		MBh	Coil Airflow cfm	Ent °F	
Main Clg	0.1	1.0	1.0	32	82.5 65.	8 T WK	60.3 5		Floor	53	2007	- 11	Main Htg	-0.3		67.8	75.
Aux Clg	0.0	0.0	0.0	C				0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0	c	3 - 10123 71			0.0 0.0	Int Door	0		- 11	Preheat	0.0	0	0.0	0.
Total	0.1	1.0							ExFIr Roof	0 53	0 0		Humidif	0.0	0	0.0	0.
TOTAL	0.1	1.0							Wall	0	0 0		Opt Vent	0.0	0	0.0	0.
									1000000			111			Ü	0.0	U.
									Ext Door	0	0 0		Total	-0.3			

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By ACADEMIC

A22 STORAGE

COOLING COIL PEAK					CLG SPACE	PEAK			HEATING C	OIL PEAK	TEMPERATURES				
Pe	aked at Time: Outside Air:	Mo/Hr: 7 / 15 OADB/WB/HR: 89 / 70 / 81			Mo/Hr: OADB:				Mo/Hr: F	Heating Design		SADB	Cooling 60.3	Heating 75.0	
	Outside Air.	UADB/WB	ITK. 09/10/0	1 88	UADB.	09			UADB.	40		Ra Plenum	81.1	67.8	
	_			:							_		81.1	67.8	
	Space	Plenum Sens. + Lat	Net	Percent	Space	Percent			Space Peak	Coil Peak		Return			
	Sens. + Lat.		Total	Of Total	Sensible	Of Total			Space Sens	Tot Sens		Ret/OA	81.1	67.8	
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	· ///		Btu/h	Btu/h	(%)	Fn MtrTD	0.1	0.0	
Envelope Loads		- 40					Envelope Lo					Fn BldTD	0.3	0.0	
Skylite Solar	0	0	0	0:	0	0	Skylite So		0	0	0.00	Fn Frict	0.9	0.0	
Skylite Cond	0		0	0:	0	0	Skylite Co		0	0	0.00				
Roof Cond	0	2,073	2,073	50	0	0	Roof Con		0	-761	85.74				
Glass Solar	0		0	0;	0	0	Glass Sol			0	0.00	Al	RFLOWS		
Glass/Door Cor			0	0;	0	0	Glass/Doc		0	0	0.00		Cooling	Heating	
Wall Cond	0		0	0:	0	0	Wall Cond		0	0	0.00	Diffuser	135	135	
Partition/Door	0		0	0:	0	0	Partition/D	Door	0	0	0.00		10.0		
Floor	0		0	0:	0	0	Floor		0	0	0.00	Terminal	135	135	
Adjacent Floor	0	0	0	0	0	0	Adjacent	Floor	0	0	0.00	Main Fan	135	135	
Infiltration	449		449	11	272	12	Infiltration		-582	-582	65.53	Sec Fan	0	(
Sub Total ==>	449	2.073	2,521	60:	272	12	Sub Total	==>	-582	-1,343	151.26	Nom Vent	0	(
							16463151631165					AHU Vent	0	(
Internal Loads							Internal Loa	ds				Infil	18	18	
	200	91	457	44	200	- 47	Links			0	0.00	MinStop/Rh	0		
Lights	366		457	11	366	17	Lights		0	0		Return	153	153	
People	0	0	0		0	0	People				0.00	500 S 600 S 600 S 600 S			
Misc	1,126	0	1,126	27:	1,126	51	Misc		1,126	1,126	-126.82	Exhaust	18	18	
Sub Total ==>	1,492	91	1,584	38	1,492	68	Sub Total	==>	1,126	1,126	-126.82	Rm Exh	0	(
									7			Auxiliary	0	(
Ceiling Load	426	-426	0	0:	426	19	Ceiling Load		-157	0	0.00	Leakage Dwn	0	(
Ventilation Load	0	0	0	0:	0	0	Ventilation L	.oad	0	0	0.00	Leakage Ups	0	(
Adj Air Trans He	at 0		0	0:	0	0	Adj Air Tran	s Heat	0	0	0				
Dehumid, Ov Siz	ina		0	0:			Ov/Undr Siz	ina	-939	-939	105.74	-			
Ov/Undr Sizing	0		0	0:	0	0	Exhaust Hea	at		44	-4.92	ENGIN	IEERING CI	(S	
Exhaust Heat		-118	-118	-3 :	70.20	-	OA Preheat	Diff.		0	0.00	Livoii	LLIMITO O		
Sup. Fan Heat			200	5:			RA Preheat	Diff.		0	0.00		Cooling	Heating	
Ret. Fan Heat		0	0	0:			Additional R			0	0.00	% OA	0.0	0.0	
Duct Heat Pkup		0	0	0:			System Plen			224	-25.27	cfm/ft²	0.61	0.61	
Underfir Sup Ht	Pkup	870.0	0	0:			Underfir Su	n Ht Pkup		0	0.00	cfm/ton	387.73		
Supply Air Leak		0	0	0:			Supply Air L			0	0.00	ft²/ton	630.54		
ouppiy All Leak	age		· ·	٠:			Oupply All E	Cakage		_	0.00	Btu/hr-ft²	19.03	-4.92	
Grand Total ==>	2,366	1,620	4,187	100.00	2,189	100.00	Grand Total	==>	-552	-888	100.00	No. People	0	4.02	
		COOLING	G COIL SELE	CTION		ĒÀ	7		AREAS		н	EATING COIL	SELECTIO	N	
	Total Capacity ton MBh	Sens Cap. MBh	Coil Airflow		DB/WB/HR gr/lb	Leave	DB/WB/HR °F gr/lb	G	ross Total	Glass ft ² (%)		Capacity MBh	Coil Airflow cfm	Ent Ly	
			700					4/92		2222					
Main Clg	0.4 4.2		135			60.3 5		Floor	220		Main Htg	-1.1		67.8 75.	
Aux Clg	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	
Opt Vent	0.0 0.0	0.0	0	0.0 0.0	0.0	0.0	0.0 0.0	Int Door ExFir	0		Preheat	0.0	0	0.0	
Total	0.4 4.2							Roof	220	0 0	Humidif	0.0	0	0.0 0.	
rotar	4.2							Wall	0		Opt Vent	0.0	0	0.0 0.	
								123333000000000000000000000000000000000		0.76			U	0.0 0.	
								Ext Door	0	0 0	Total	-1.1			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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A23 HALLWAY

COOLING COIL PEAK						CLG SPACE		HEATING C		TEMPERATURES							
Pe	eaked at Outsid			/Hr: 7 / 15 HR: 89 / 70 / 8	11	Mo/Hr: OADB:				Mo/Hr: H OADB:		Design		SADB Ra Plenum	Cooling 60.7 83.1		75.0 67.1
		Space	Plenum	Net	Percent	Space	Percent			Space Peak	C	oil Peak	Percent	Return	83.1		67.1
	Se	ns. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens	(37)	ot Sens		Ret/OA	83.1		67.1
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h		Btu/h		Fn MtrTD	0.1		0.0
Envelope Loads	33	Dium	Ditail	Bidill	(70)	Diam	(70)	Envelope Lo	and a	Didili		Blun	(70)	Fn BldTD	0.3		0.0
Skylite Solar	8	0	0	0	0	0	0	Skylite So		0		(0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		6	0.00	FILENCE	0.9		0.0
Roof Cond		0	1.377	1,377	41	0	0	Roof Con		0		-507					_
Glass Solar		0	0,377	1,3//	70.	0	0	Glass Sol		0	1	-507			IRFLOWS		
Glass/Door Co	a al	0	0	0	0:	0	0			0		0		_ A			
Wall Cond	IIU	0	0	0	0:	0	0			0		Ċ			Cooling	He	eating
Partition/Door		0	U	0	0:	0	0			0		Ċ		Diffuser	128		128
		0		0	0:	0	0		1000	0		0		Terminal	128		128
Floor			0	0										Main Fan	128		128
Adjacent Floor		0	0		0	0	0	Adjacent		0		0					
Infiltration		310		310	9:	185	9	Infiltration		-397		-397		Sec Fan	0		0
Sub Total ==>		310	1,377	1,687	50:	185	9	Sub Total	==>	-397		-904	81.39	Nom Vent	0		0
								Barry gran	20					AHU Vent	0		0
Internal Loads								Internal Loa	ds					Infil	12		12
Lights		685	171	856	25	685	34	Lights		0		C	0.00	MinStop/Rh	0		0
People		0	0	0	0:	0	0	People		0		C		Return	140		140
Misc		768	0	768	23	768	38	Misc		768		768		Exhaust	12		12
Sub Total ==>		1,453	171	1,624	48	1,453	72	Sub Total	A/	768		768		Rm Exh	0		0
Sub Iolai>		1,455	17.1	1,024	40:	1,455	12	Sub Total	7-1	700		700	-09.12	Auxiliary	0		0
Ceiling Load		383	-383	0	0	383	19	Ceiling Load		-137		0	0.00	Leakage Dwn	Ö		0
Ventilation Load	e e	363	-363	0	7.5	0	19	Ventilation L		-137		Č			0		0
		15500	U	5.70	0:	8 0076	- 5			0		Ċ	257877777	Leakage Ups	U		U
Adj Air Trans He		0		0	0	0	0	Adj Air Tran		(27)			3 3570				
Dehumid. Ov Si	zing			0	0;			Ov/Undr Siz		-939		-939				AAAT IS	
Ov/Undr Sizing		0	3272	0	0:	0	0	Exhaust Hea				38		ENGI	NEERING C	KS	
Exhaust Heat			-106	-106	-3:			OA Preheat				C			Castina		
Sup. Fan Heat				190	6;			RA Preheat				C		0/ 04	Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional F				- 0		% OA	0.0		0.0
Duct Heat Pkup			0	0	0			System Pler				-73	2 (2.4)	cfm/ft²	0.85		0.85
Underfir Sup Ht	Pkup			0	0			Underfir Su				C	2 23.0000000	cfm/ton	452.36		
Supply Air Leak	age		0	0	0:			Supply Air L	.eakage			C	0.00	ft²/ton	530.36		
										100	F		S ASSOCIATION	Btu/hr-ft ²	22.63	-	-7.41
Grand Total ==>	§i	2,145	1,059	3,394	100.00	2,021	100.00	Grand Total	==>	-705		-1,111	100.00	No. People	0		
			COOLING	COIL SELI	ECTION		7 À	7		AREAS			НЕ	ATING COIL	SELECTIO	N	
	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	1	The same of the sa	ft ²	(%)		MBh	cfm	°F	
						. 19 19 19 19 19 19 19 19 19 19 19 19 19	60.7.5		120	450		3,677	3 (29)			07.4	75.0
Main Clg	0.3	3.4	3.3	128			60.7 5		Floor	150			Main Htg	-1.1		67.1	75.0
Aux Clg	0.0	0.0	0.0	C		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	C	0.0	0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	0.3	3.4							Roof	150	0	0	Humidif	0.0	0	0.0	0.0
	0.0	J. T.							Wall	0	o	100	Opt Vent	0.0	0	0.0	0.0
									1000000	0	0	0			9	0.0	0.0
									Ext Door		0		Total	-1.1			

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By ACADEMIC

A24 IT

	COOLING	COIL PEAK		(CLG SPACE	PEAK			HEATING C	OIL PEAK		TEM	PERATURE	s	
Р	eaked at Time: Outside Air:		/Hr: 8 / 16 HR: 89 / 71 / 88	3	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating Design 40		SADB	Cooling 55.6	Heatin 75 67	5.0
	Space	Plenum	Net	Percent	Space	Percent			Space Peak	Cail Book	Percent	Ra Plenum Return	82.4 82.4	67	
	Sens. + Lat.	Sens. + Lat _		Of Total	Sensible	Of Total					Of Total	Ret/OA	84.2		9.3
	Btu/h	Btu/h	Btu/h		Sensible Btu/h				Space Sens Btu/h	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load		Biu/n	Btu/n	(%)	Btu/n	(%)	Envelope Loa	4.	Btu/n	Blu/r	(%)	Fn BldTD	0.1		0.0
Skylite Solar	0	0	0	0:	0	0	Skylite Sola		0		0.00	Fn Frict	0.9		0.0
Skylite Cond	0	0	0	0:/	0	0	Skylite Con		0			rn rnct	0.9	U	
Roof Cond	0	925	925	31	0	0	Roof Cond		0	-372					-
Glass Solar	0	323	0	0.	0	0	Glass Solar		0	512		ΙΙ Δ	IRFLOWS		
Glass/Door Co		0	ō	0:	0	0	Glass/Door		0	Č		**			
Wall Cond	0	0	0	0:	0	0	Wall Cond	Cond	0	Č	0.00		Cooling	Heat	
Partition/Door	0	3	0	0:	0	0	Partition/Do	oor	0	Ċ		Diffuser	69		69
Floor	0		0	0:	0	0	Floor		0	C		Terminal	69		69
Adjacent Floor		0	0	0:	0	0	Adjacent FI	oor	0	Ċ		Main Fan	69		69
Infiltration	264	19.0	264	9:	136	9	Infiltration		-291	-291		Sec Fan	0		0
Sub Total ==>	264	925	1,189	40:	136	9	Sub Total =	=>	-291	-663		Nom Vent	20		20
oub rotar	204	020	1,100	40:	100				1000		0.75	AHU Vent	20		20
Internal Loads						9	Internal Loads	s				Infil	9		9
	0.10		207	40:	0.40		11.14				0.00		0		0
Lights	246	61	307	10	246	17	Lights	1	0	0		MinStop/Rh Return	78		78
People	450	0	450	15	250 563	17 38	People		563		2 0707070	57775677777777777	29		29
Misc	563	_	563	19:			Misc		100	563		Exhaust	29		0
Sub Total ==>	1,259	61	1,320	44 :	1,059	72	Sub Total =	=>	563	563	-47.00	Rm Exh	0		
	22000	1 8200	1620		1				400		0.00	Auxiliary			0
Ceiling Load	259	-259	0	0:	281		Ceiling Load	4	-100	0		Leakage Dwn	0		0
Ventilation Loa	935 (65)	0	600	20 :	0	0	Ventilation Lo		0	-661		Leakage Ups	0		0
Adj Air Trans H	Sign (e)		0	0	0	0	Adj Air Trans		0	C	3				
Dehumid. Ov S			0	0 ;			Ov/Undr Sizin		-553	-553		200		LANCE OF THE SECOND	
Ov/Undr Sizing	0	1992	0	0:	0	0	Exhaust Heat			91		ENGIN	NEERING CI	KS	
Exhaust Heat		-236	-236	-8 :			OA Preheat D			0			Caslina	Heatir	1000
Sup. Fan Heat		220	102	3;			RA Preheat D			0		% OA	Cooling 28.9		ng 3.9
Ret. Fan Heat		0	0	0:			Additional Re			25		cfm/ft²	0.63	0.6	9,1993
Duct Heat Pkup		0	0	0:			System Plenu			20				0.0	33
Underfir Sup H			0	0		į.	Underfir Sup				0.000	cfm/ton	278.74		
Supply Air Leal	cage	0	0	0:			Supply Air Le	akage		_	0.00	ft²/ton	443.56	72	22
Grand Total ==	> 1,782	491	2,976	100.00	1,475	100.00	Grand Total =	=>	-381	-1,198	100.00	Btu/hr-ft² No. People	27.05 1	-10.8	39
		COOLING	COIL SELE	CTION		ĒÀ	7 =		AREAS	1	н	EATING COIL	SELECTIO	N	=
	Total Capacity		Coil Airflow		B/WB/HR	Leave	DB/WB/HR	- (Gross Total	Glass	35.50		Coil Airflow		Lvg
	ton MBh	MBh	cfm	°F °F		°F	°F gr/lb	- 7	orosa rotar	ft² (%)		MBh	cfm	°F	°F
Main Clg	0.3 3.0	2.3	69	85.5 67.3		55.6 5		Floor	110		Main Htg	-1.2			75.0
Aux Clg	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 ExFir	0		Preheat	0.0	0	0.0	0.0
Total	0.3 3.0						- 11	Roof	110	0 0	Humidif	0.0	0	0.0	0.0
10.55	5.0							Wall	0	0 0	Opt Vent	0.0	o	0.0	0.0
							- 11	Ext Door	0	0 0	Total	-1.2	Ĭ)	7565	est of
								EXT DOOL	U	U U	rotar	-1.2			

Project Name: Sunnylands

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By ACADEMIC

A25-1 OPEN OFFICE SPACE 1

	COOLIN	G COII	L PEAK			CLG SPACE	PEAK			HEATING (COIL P	EAK		TEM	PERATURE	S	
Pea	ked at Time: Outside Air:	8		/Hr: 7 / 15 HR: 89 / 70 / 8	1	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 58.1 80.9		ting 75.0 67.6
	Spa	ice	Plenum	Net	Percent	Space	Percent			Space Peak	c	oil Peak	Percent	Return	80.9		67.6
	Sens. + I		ens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	82.0		33.8
	Rt	u/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	7 /	Btu/h	A STATE OF THE PARTY OF THE PAR	Fn MtrTD	0.1		0.0
Envelope Loads	5.		Didi	Dian	(10)		1,01	Envelope Lo	ads			Dian	(10)	Fn BldTD	0.3		0.0
Skylite Solar	4.3	90	0	4,290	16	4,290	26	Skylite So		0		(0.00	Fn Frict	0.9		0.0
Skylite Cond		0	125	125	0:	0	0	Skylite Co		0		-501			200		202
Roof Cond		0	6.956	6,956	25	0	0	Roof Con		0		-2,530					
Glass Solar	2,6	74	0	2,674	10:	2,674	16	Glass Sol	ar	0		(0.00	A	IRFLOWS		
Glass/Door Con	d 1,2	79	0	1,279	5;	1,279	8	: Glass/Doo	or Cond	-3,118		-3,118	22.68	~~	Cooling	U.	ating
Wall Cond		0	81	81	0:	0	0	: Wall Cond	d	0		-130	0.94		5072 E 2010		_
Partition/Door		0		0	0:	0	0		Door	0		(Diffuser	871		871
Floor		0		0	0:	0	0	Floor		0		(Terminal	871		871
Adjacent Floor		0	0	0	0	0	0	Adjacent	Floor	0		(0.00	Main Fan	871		871
Infiltration	1,6	89		1,689	6:	1,010	6			-2,164		-2,164		Sec Fan	0		0
Sub Total ==>	9,9	32	7,161	17,094	62:	9,253	57	; Sub Total	==>	-5,282		-8,443	61.40	Nom Vent	120		120
								letrory sear						AHU Vent	120		120
Internal Loads								Internal Loa	ds					Infil	65		65
Lights	1.7	69	442	2,211	8:	1,769		Lights		0		(0.00	MinStop/Rh	0		0
People	2,7	00	0	2,700	10	1,500	9	People		0		(0.00	Return	936		936
Misc	2,2	205	0	2,205	8 :	2,205	14	Misc		0		(0.00	Exhaust	185		185
Sub Total ==>	6.6	74	442	7,116	26	5,474	34	Sub Total	==>	0		(0.00	Rm Exh	0		0
	200		5,65700	11000									14 (5,000-10)	Auxiliary	0		0
Ceiling Load	1.5	27	-1.527	0	0:	1.527	9	Ceiling Load	1	-635		(0.00	Leakage Dwn	0		0
Ventilation Load		0	0	3,098	11	0	0	Ventilation L	.oad	0		-3,968	28.86	Leakage Ups	0		0
Adj Air Trans Hea	ıt	0		0	0:	0	0	Adj Air Tran	s Heat	0		(0 0				
Dehumid, Ov Sizi	na			0	0:			Ov/Undr Siz	ina	-1,840		-1,840	13.38	2			_
Ov/Undr Sizing		0		0	0	0	0	Exhaust Hea				500	-3.64	FNGI	NEERING C	KS	
Exhaust Heat			-1,204	-1,204	-4:			OA Preheat	Diff.			(0.00	Livon			
Sup. Fan Heat				1,290	5;			RA Preheat	Diff.			(Cooling	Hea	
Ret. Fan Heat			0	0	0:			: Additional R				(% OA	13.8		13.8
Duct Heat Pkup			0	0	0			System Pler				(2 377777	cfm/ft²	1.06	1	1.06
Underfir Sup Ht F	kup			0	0			Underfir Su	p Ht Pkup			(S2 S3555550	cfm/ton	381.38		
Supply Air Leaka	ge		0	0	0:			Supply Air L	.eakage			(0.00	ft²/ton	358.34		
Grand Total ==>	18,1	33	4,873	27,393	100.00	16,253	100.00	Grand Total	==>	-7,756		-13,750	100.00	Btu/hr-ft² No. People	33.49 6	-13	3.19
	300		COOLING	COIL SELE	CTION		ĒÀ	¥ Ħ	<u> </u>	AREAS	3		HE	EATING COIL	SELECTIO	N	_
	Total Capac	XX	ens Cap.	Coil Airflow		DB/WB/HR	Leave	DB/WB/HR	7	Gross Total	Glass				Coil Airflow	Ent	Lv
		Bh	MBh	cfm		°F gr/lb	°F	°F gr/lb			ft²	(%)		MBh	cfm	°F	9
Main Clg	2.3 2	7.4	24.3	871	83.4 65	5.7 67.6	58.1 5	5.5 62.4	Floor	818		1000000	Main Htg	-10.8	871	63.8	75.
Aux Clg		0.0	0.0	0		0.0 0.0		0.0 0.0	Part	0		- 1	Aux Htg	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.
		-						2.0	ExFir	0					•		
Total	2.3 2	7.4							Roof	818	82	10	Humidif	0.0	0	0.0	0.
and confi	A. 1878 100 100 100 100 100 100 100 100 100 10								Wall	211	169	80	Opt Vent	0.0	0	0.0	0.0

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A25-2 OPEN OFFICE SPACE 2

	ed at Time: Outside Air:	Mo	/Hr: 7 / 15								2			2000		
	Caldide All.	OADB/WB	/HR: 89 / 70 / 8	1	OADB:	7 / 14 88			Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	59.8 79.5		ting 75.0 67.7
	Space	Plenum	Net	Percent:	Space	Percent			Space Peak		oil Peak	Percent	Return	79.5		67.7
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	80.4		65.2
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	7 /	Btu/h	A STATE OF THE PARTY OF THE PAR	Fn MtrTD	0.1		0.0
Envelope Loads	Diam	Diditi	Diam.	(10)	4	1,01	Envelope Lo	ads	J. J.		Julian	(70)	Fn BldTD	0.3		0.0
Skylite Solar	10,316	0	10,316	30:	10,665	48			0		(0.00	Fn Frict	0.9		0.0
Skylite Cond	0	386	386	1:0	0	0	Skylite Co		0		-1,349					202
Roof Cond	0	7.083	7,083	20	0	0	Roof Con		0		-2,547					
Glass Solar	2,674	0	2,674	8:	2,715	12	Glass Sol	ar	0	A .	C	0.00	Α	IRFLOWS		
Glass/Door Cond	1,279	0	1,279	4:	1,145	5	: Glass/Do	or Cond	-3,118		-3,118	18.23		Cooling	. U.	ating
Wall Cond	0	87	87	0:	0	0	: Wall Cond	d t	0		-131	0.76		7077E271		_
Partition/Door	0		0	0:	0	0		Door	0		C		Diffuser	1,311		1,311
Floor	0		0	0:	0	0	Floor		0		C		Terminal	1,311		1,311
Adjacent Floor	0	0	0	0	0	0	Adjacent	Floor	0		C	0.00	Main Fan	1,311		1,311
Infiltration	1,682		1,682	5:	967	4	30 (1997) 1997 1997 1997		-2,164		-2,164		Sec Fan	()	0
Sub Total ==>	15,951	7,556	23,507	68:	15,491	70	; Sub Total	==>	-5,282		-9,309	54.42	Nom Vent	120)	120
							latine sear						AHU Vent	120)	120
Internal Loads							Internal Loa	ds					Infil	65	5	65
Lights	1.769	442	2,211	6:	1,769	8	Lights		0		0	0.00	MinStop/Rh	()	0
People	2,700	0	2,700	8:	1,500	7	People		0		C		Return	1,377	,	1,377
Misc	2,205	0	2,205	6:	2,123	10	Misc		0		0	0.00	Exhaust	185		185
Sub Total ==>	6,674	442	7,116	20	5,392	24	Sub Total	==>	0		0	0.00	Rm Exh	()	0
oud rolar	0,011	1,05%	.,,,,	:	0,002	100	:				1		Auxiliary	()	0
Ceiling Load	1.167	-1.167	0	0:	1.130	5	Ceiling Load	d /	-588		C	0.00	Leakage Dwn	()	0
Ventilation Load	0	0	3,084	9:	0	0	Ventilation I	_oad	0		-3,968	3 23.20	Leakage Ups	()	0
Adj Air Trans Heat	0		0	0:	0	0	Adj Air Tran	s Heat	0		C	0 0				
Dehumid. Ov Sizin	a		0	0:	1101		Ov/Undr Siz	ina	-4,291		-4,291	25.09				_
Ov/Undr Sizing	0		0	0:	0	0	Exhaust He		630 5 13770		463		FNGIN	NEERING C	KS	
Exhaust Heat		-920	-920	-3:	(1.5)		OA Preheat				C		LIVOII		NO	
Sup. Fan Heat			1,942	6;			RA Preheat	Diff.			C	0.00		Cooling	Hea	
Ret. Fan Heat		0	0	0:			Additional F	Reheat					% OA	9.2		9.2
Duct Heat Pkup		0	0	0:			System Pler	num Heat			C		cfm/ft²	1.60		1.60
Underfir Sup Ht Pk	tup		0	0			Underfir Su	p Ht Pkup			C	0.00	cfm/ton	453.04		
Supply Air Leakag	e	0	0	0:			Supply Air I	_eakage			C	0.00	ft²/ton	282.64		
Grand Total ==>	23,792	5,911	34,730	100.00	22,013	100.00	Grand Total	==>	-10,161		-17,105	100.00	Btu/hr-ft² No. People	42.46 6	-1	7.32
	357	COOLING	G COIL SELE	CTION		7 A	¥ Ħ	-	AREAS		7	н	EATING COIL	SEI ECTIC	N.	_
	Total Capacity	Sens Cap.	Coil Airflow		DB/WB/HR	Lanu	DB/WB/HR	-	Gross Total	Glass		333		Coil Airflow	Ent	Lv
	ton MBh	MBh	cfm		F gr/lb	F	°F gr/lb	1	Gloss Iotal	ft ²	(%)		MBh	cfm	°F	۰
Main Clg	2.9 34.7	31.6	1,311	81.7 65	1 67.0	59.8 5	6.5 63.7	Floor	818			Main Htg	-14.2	1,311	65.2	75.
	0.0 0.0	0.0	.,				0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
	0.0 0.0	0.0	c				0.0 0.0	Int Door	0			Preheat	0.0	0	0.0	0.
ap. June	0.0	0.0		0.0	- 0.0	0.0	0.0	ExFir	0			········	0.0		0.0	
Total	2.9 34.7							Roof	818	82	10	Humidif	0.0	0	0.0	0.
starses!	15333							Wall	211	169	100000	Opt Vent	0.0	Ō	0.0	0.0
								Ext Door	0	0	0	Total	-14.2			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A25-3 OPEN OFFICE SPACE 3

	C	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL PEA	K		TEM	PERATURE	S	
Pe	aked at Outsi	t Time: de Air:		o/Hr: 7 / 15 /HR: 89 / 70 / 8	ı1 :	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating De 40	sign		SADB	Cooling 59.8		ating 75.0
	S	Space ens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peak	200		Percent Of Total	Ra Plenum Return Ret/OA	79.5 79.5 80.4		67.7 67.7 65.2
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h		Btu/h		Fn MtrTD	0.1		0.0
Envelope Loads			40					Envelope Lo						Fn BldTD	0.3		0.0
Skylite Solar		10,316	0	10,316	30	10,665	48	Skylite Sol		0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	386	386	401	0	0	Skylite Co		0		1,349					_
Roof Cond		0	7,083	7,083	20	0 745	0	Roof Cond		0 0		2,547			IRFLOWS		
Glass Solar		2,674 1,279	0 0	2,674	8:	2,715	12	Glass Sola Glass/Doo		(1)		0 440	0.00	A	IRFLOWS		
Glass/Door Co Wall Cond	na	1,279	87	1,279 87	4:	1,145 0	5	Wall Cond		-3,118 0		3,118- 131-			Cooling	He	eating
Partition/Door		0	87	0	0:	0	0	Partition/D		0		-131		Diffuser	1,311		1,311
Floor		0		0	0:	0	0	Floor	1001	0		0		Terminal	1,311		1,311
Adjacent Floor		0	0	0	0:	0	0	Adjacent F	loor	0		0		Main Fan	1,311		1,311
Infiltration		1,682	U	1,682	5	967	4		1001	-2,164		2,164		Sec Fan	0		0
Sub Total ==>		15,951	7,556	23,507	68:	15,491	70	Sub Total		-5.282		9,309		Nom Vent	120		
Sub Iolai ==>		15,951	7,556	23,507	60:	15,491	70	Gub Total		-5,202		3,303	34.42				120
								Internal Load	de					AHU Vent	120		120
Internal Loads		200	1100000	10411414111						111				Infil	65		65
Lights		1,769	442	2,211	6	1,769	8	Lights		0		0		MinStop/Rh	0		0
People		2,700	0	2,700	8:	1,500	7	People		0		0		Return	1,377		1,377
Misc		2,205	0	2,205	6:	2,123	10	Misc		0		0		Exhaust	185		185
Sub Total ==>		6,674	442	7,116	20	5,392	24	Sub Total	==>	0		0	0.00	Rm Exh Auxiliary	0		0
Ceiling Load		1.167	-1.167	0	0	1.130	5	Ceiling Load		-588		0	0.00	Leakage Dwn	0		0
Ventilation Load	Ĕ.	0	0	3.084	9:	0	0	Ventilation L		0		3,968		Leakage Ups	0		0
Adj Air Trans He	at	0	19	0	0:	0	0	Adj Air Trans		0		0		Louising opo	,,,		
Dehumid. Ov Si		1000		0	0:	1100	-	Ov/Undr Sizi		-4,291		4,291	25.09				
Ov/Undr Sizing	9	0		0	0:	0	0	Exhaust Hea				463		ENGI	NEERING C	KS	
Exhaust Heat			-920	-920	-3:			OA Preheat I				0		LIVOII		NO	
Sup. Fan Heat				1,942	6;			RA Preheat I	Diff.			0	0.00		Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional R				0		% OA	9.2		9.2
Duct Heat Pkup			0	0	0:			System Plen	um Heat			0		cfm/ft²	1.60		1.60
Underfir Sup Ht	Pkup			0	0			Underfir Sup	Ht Pkup			0		cfm/ton	453.04		
Supply Air Leak	age		0	0	0:			Supply Air L	eakage			0	0.00	ft²/ton	282.64		
Grand Total ==>		23,792	5,911	34,730	100.00	22,013	100.00	Grand Total	==>	-10,161	-1	7,105	100.00	Btu/hr-ft ² No. People	42.46 6	-1	7.32
			COOLING	G COIL SELI	CTION		ĒÀ	7	=	AREAS		$\overline{}$	н	EATING COIL	SELECTIO	N	
	Tota	I Capacity	Sens Cap.	Coil Airflow		DB/WB/HR	Leave	DB/WB/HR		Gross Total	Glass		25.50		Coil Airflow	Ent	Lve
	ton	MBh	MBh	cfm		F gr/lb	°F	°F gr/lb	77	1000	ft² (9	6)		MBh	cfm	°F	
Main Clg	2.9	34.7	31.6	1.311	81.7 65.	A 17000	59.8 5		Floor	818	18008 1000	·/	Main Htg	-14.2	1,311	65.2	75.0
Aux Clg	0.0	0.0	0.0	1,311				0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.0
	0.0	0.0	0.0		3 1923 9			0.0 0.0	100000000000000000000000000000000000000				_		0	0.0	0.
Opt Vent	0.0	0.0	0.0	0.0	0.0 0.	.0 0.0	0.0	0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.
Total	2.9	34.7							Roof	818	82 1	10	Humidif	0.0	0	0.0	0.
									Wall	211	169 8	30	Opt Vent	0.0	0	0.0	0.0
												0		-14.2			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A25-4 OPEN OFFICE SPACE 4

	COOLING	COIL PEAK			CLG SPACE	PEAK			HEATING	COIL PEAK		TEM	PERATURE	s
Pea	ced at Time: Outside Air:		Hr: 7/15 R: 89/70/8	11	Mo/Hr: OADB:	0.000			Mo/Hr: OADB:	Heating Design 40		SADB Ra Plenum	Cooling 59.2 79.6	Heating 75.0 67.6
	Space	Plenum	Net	Percent :	Space	Percent	:		Space Peak	Coil Peal	Percent	Return	79.6	67.6
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens	Tot Sens		Ret/OA	80.5	65.1
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	Btu/i	A STATE OF THE PARTY OF THE PAR	Fn MtrTD	0.1	0.0
Envelope Loads	Dium	Ditta	Bian	(70)	Did/II	(10)	Envelope Lo	ande	Did/II	Blun	(70)	Fn BldTD	0.3	0.0
Skylite Solar	10,316	0	10,316	29	10,316	45	Skylite Sc		0		0.00	Fn Frict	0.9	0.0
Skylite Cond	0,510	380	380	1:	0,010	0	Skylite Co		0	-1,344		FILTIO	0.0	0.0
Roof Cond	0	7.072	7,072	20	o o	0	Roof Con		0	-2,538				
Glass Solar	2.674	0,072	2.674	7:	2,674	12	Glass Sol		0	-2,000		ΔΙ	RFLOWS	
Glass/Door Cond		0	1.279	4	1,279	6			-3,118	-3.118	0.00			
Wall Cond	1,051	365	1,416	4:	1,051	5			-930	-1,275			Cooling	Heating
Partition/Door	1,031	303	1,410	0:	1,031	0	Partition/I	5	-530	-1,27		Diffuser	1,321	1,321
Floor	0		ő	0:	0	0		3001	0	Č		Terminal	1,321	1,321
Adjacent Floor	0	0	0	0:	0	0	Adjacent	Eleer	0			Main Fan	1,321	1,321
Infiltration	1.690	U	1.690	5	1.010	4	Infiltration		-2.164	-2,164		Sec Fan	0	0
13 x 20 x 12 x 20 x 20 x 20 x 20 x 20 x 20		7040	1200000000	50550										
Sub Total ==>	17,010	7,818	24,828	69	16,330	71	Sub Total	==>	-6,213	-10,439	58.68	Nom Vent	120	120
							100	20				AHU Vent	120	120
Internal Loads				:			Internal Loa	ds				Infil	65	65
Lights	1,769	442	2,211	6:	1,769	8	Lights		0	(0.00	MinStop/Rh	0	0
People	2,700	0	2,700	7:	1,500	7	People		0	(0.00	Return	1,386	1,386
Misc	2,205	0	2,205	6:	2,205	10	Misc		0	: (0.00	Exhaust	185	185
Sub Total ==>	6.674	442	7,116	20:	5,474	24	Sub Total	4-5	0	(0.00	Rm Exh	0	0
Sub Total	0,014	442	7,110	20:	3,474	1	Sub rotar			,	0.00	Auxiliary	0	0
Ceiling Load	1.198	-1.198	0	0:	1.198	5	Ceiling Load	4	-613	(0.00	Leakage Dwn	0	0
Ventilation Load	0,130	0	3.098	9:	0	0	Ventilation I		0	-3,968		Leakage Ups	0	0
Adj Air Trans Hea	. 150		0,000	0:	0		Adi Air Tran		0	(Leakage Ops	Ü	
시간 경우 경우 다른 경우 경우 경우 경우 다른 경우	1000		250	20.000	U	U				-3.866				
Dehumid. Ov Sizir			0	0;	7.2	_	Ov/Undr Siz		-3,866	-3,866				
Ov/Undr Sizing	0	-945	-945	0:	0	0	Exhaust He			40.		ENGIN	IEERING CI	KS
Exhaust Heat		-945	1.957	-3 ; 5 :			OA Preheat						Cooling	Heating
Sup. Fan Heat		0	1,957	0:			RA Preheat			- (% OA	9.1	9.1
Ret. Fan Heat		0	0	0:			Additional F System Pler			· ·		cfm/ft²	1.61	1.61
Duct Heat Pkup		0		0.						,				1.01
Underflr Sup Ht P	200		0				Underfir Su				57 (37.07.00)	cfm/ton	439.59	
Supply Air Leakag	е	0	0	0;			Supply Air I	_eakage			0.00	ft²/ton	272.26	772
Grand Total ==>	24,882	6,117	36,054	100.00	23,002	100.00	Grand Total	==>	-10,692	-17,790	100.00	Btu/hr-ft² No. People	44.08 6	-17.58
	745	COOLING	COIL SELE	CTION		ĒÀ	¥ Ħ		AREAS	1	н	EATING COIL	SELECTIO	N
	Total Capacity		Coil Airflow		DB/WB/HR	Lasur	DB/WB/HR		Gross Total	Glass	3.00		Coil Airflow	Ent Lv
	ton MBh	MBh	cfm	072,000,000	°F gr/lb	F	°F gr/lb		Sioss Iotal	ft² (%)		MBh	cfm	°F °
Main Clg	3.0 36.1	32.9	1,321	81.8 65	66.9	59.2 5	6.2 63.5	Floor	818		Main Htg	-14.4	1,321	65.1 75.
Aux Clg	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.
Opt Vent	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.
Total	3.0 36.1							ExFIr Roof	0 818	82 10	Humidif	0.0	0	0.0 0.
(acaedii)								Wall	558	169 30	Opt Vent	0.0	0	0.0 0.
								Ext Door	0	0 0	Total	-14.4	Ĭ	766 858
								EXT DOOR	U	0 0	rotar	-14.4		

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A25-5 OPEN OFFICE SPACE 5

	CC	OLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL PE	٩K		TEM	PERATURE	S	
P	Peaked at Outsid	1333		o/Hr: 7 / 15 /HR: 89 / 70 / 8	11	Mo/Hr: OADB:		1		Mo/Hr: OADB:	Heating De	esign		SADB	Cooling 59.8		75.0
		Space	Plenum	Net	Percent	Space	Percent	:		Space Peak	Cal	Dook	Percent	Ra Plenum Return	79.5 79.5		67.7 67.7
	Se	ns. + Lat.	Sens. + Lat	Total	Of Total		Of Total					Sens		Ret/OA	80.3		65.3
	0.	Btu/h	Btu/h	Btu/h	The state of the s	Sensible Btu/h	10000000			Space Sens Btu/h	101	Btu/h	- CONTRACTOR OF THE PARTY OF TH	Fn MtrTD	0.1		0.0
Envelope Load	-	Blu/n	Biu/n	Btu/n	(%)	Btu/n	(%)	Envelope Lo	and a	Btu/n		Btu/n	(%)	Fn BldTD	0.3		0.0
Skylite Solar	ıs	10,316	0	10,316	29:	10,665	47			0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	387	387	1:	10,003	0	Skylite Co		0		-1,349		FILFILL	0.9		0.0
Roof Cond		0	7.085	7,085	20	0	0			0		2,547					
Glass Solar		2.674	0	2,674	8.	2.715	12	200000000000000000000000000000000000000		0		0	0.00	A	IRFLOWS		
Glass/Door Co	ond	1,279	0	1.279	4:	1,145	5			-3,118	8	-3.118					
Wall Cond		533	258	791	2:	604	3			-461		-698			Cooling		eating
Partition/Door		0		0	0:	0	0		Door	0		0		Diffuser	1,353		1,353
Floor		0		0	0:	0	0	Floor		0		0	0.00	Terminal	1,353		1,353
Adjacent Floo	r	0	0	0	0:	0	0	Adjacent	Floor	0		0	0.00	Main Fan	1,353		1,353
Infiltration		1,690		1,690	5	967	4	Infiltration		-2,164	1	2,164	12.24	Sec Fan	0		0
Sub Total ==>		16,492	7,730	24,222	68:	16,096	71	; Sub Total	==>	-5,743	9.	9,877	55.89	Nom Vent	120		120
								I was a second					2 10/03/99/35-3	AHU Vent	120		120
Internal Loads								Internal Loa	ds					Infil	65		65
Lights		1,769	442	2,211	6	1,769	8	Lights		0		0	0.00	MinStop/Rh	0		0
People		2.700	0	2,700	8:	1,500	7			0		0		Return	1,418		1,418
Misc		2,205	0	2,205	6	2,123	9			0		ő		Exhaust	185		185
Sub Total ==>	a	6,674	442	7,116	20	5,392	24	Sub Total	1	0		0		Rm Exh	0		0
SUD TOTAL>		0,074	442	7,110	20:	3,392	44	Sub Total	7-7	U		U	0.00	Auxiliary	0		0
Ceiling Load		1.162	-1.162	0	0:	1.133	5	Ceiling Load	1	-588		0	0.00	Leakage Dwn	0		0
Ventilation Loa	ıd	0	-1,102	3,099	9:	0	0	Ventilation I		0		3.968		Leakage Ups	n		0
Adj Air Trans H	leat	0		0,000	0:	0	0	Adj Air Tran		0		0		Leakage ops			
Dehumid, Ov S		U		0	0:			Ov/Undr Siz		-4,291		4,291		-			_
Ov/Undr Sizing		0		0	0:	0	0	Exhaust He		1,401		464		ENGU	NEERING C	VC	
Exhaust Heat	8	U	-916	-916	-3		Ü	OA Preheat				0		ENGI	NEEKING C	NO.	
Sup. Fan Heat			1.55	2.005	6:			RA Preheat				0	0.00		Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional F				0	0.00	% OA	8.9		8.9
Duct Heat Pkup	p		0	0	0:			System Pler	num Heat			0	0.00	cfm/ft²	1.65		1.65
Underfir Sup H				0	0:			Underfir Su	p Ht Pkup			0	0.00	cfm/ton	457.04		
Supply Air Lea	kage		0	0	0:			Supply Air I	.eakage			0	0.00	ft²/ton	276.31		
	300 5 00						///						E DESCRIPTION	Btu/hr-ft²	43.43	-1	7.73
Grand Total ==	>	24,328	6,094	35,526	100.00	22,620	100.00	Grand Total	==>	-10,622	-1	7,672	100.00	No. People	6		NO SERVICE
			COOLING	COIL SELE	CTION		7 À			AREAS			HI	EATING COIL	SELECTIO	N	
		Capacity	Sens Cap.	Coil Airflow		DB/WB/HR		e DB/WB/HR	133	Gross Total	Glass				Coil Airflow	Ent	
	ton	MBh	MBh	cfm	°F	°F gr/lb	⊸°F	°F gr/lb			ft² (°	%)		MBh	cfm	°F	9
Main Clg	3.0	35.5	32.4	1,353	81.7 65	.0 66.8	59.8 5	6.5 63.7	Floor	818			Main Htg	-14.5	1,353	65.3	75.
Aux Clg	0.0	0.0	0.0	1,000				0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0	c	3 1023 5			0.0 0.0	Int Door			- 11	Preheat	0.0	0	0.0	0.
Opt vent	0.0	0.0	0.0		0.0 0	.0 0.0	0.0	0.0	ExFlr	0			rieneat	0.0	U	0.0	U.
Total	3.0	35.5							Roof	818	82	10	Humidif	0.0	0	0.0	0.
	0.0	55.5							Wall	383		0.00	Opt Vent	0.0	0	0.0	0.
									Ext Door		0	100	Total	-14.5	ő	7.00	
									Ext Door		U	U	rotar	-14.5			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A25-6 OPEN OFFICE SPACE 6

	COOLING	COIL PEAK	(CLG SPACE	PEAK			HEATING (COILP	EAK		TEM	PERATURE	S	
Pe	aked at Time: Outside Air:		Mo/Hr: 7 / 15 B/HR: 89 / 70 / 8	31	Mo/Hr: OADB:		:		Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 59.8 79.1		ting 75.0 68.0
	Space	Plenun	n Net	Percent	Space	Percent	:		Space Peak		oil Peak	Percent	Return	79.1		68.0
	Sens. + Lat			Of Total	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	80.0		35.4
	Btu/f	Btu/i		(%)	Btu/h	(%)			Btu/h	7 /	Btu/h	A STATE OF THE PARTY OF THE PAR	Fn MtrTD	0.1		0.0
Envelope Loads	Dian	Dian	Diam	(70)	Did.ii	(10)	Envelope Lo	nads	Old II		Dian	(70)	Fn BldTD	0.3		0.0
Skylite Solar	10,316	. / (10,316	30	10,665	49			0		/ (0.00	Fn Frict	0.9		0.0
Skylite Cond	.0,0	4000		1	0	0	Skylite Co		0		-1,363					202
Roof Cond	į.			20	0	0	Roof Con		0		-2,573					
Glass Solar	2.674		2,674	8.	2,715	12	Glass Sol	ar	0		(0.00	A	IRFLOWS		
Glass/Door Cor	d 1,279) (1,279	4	1,145	5	Glass/Do	or Cond	-3,118		-3,118	18.75	500	Cooling		
Wall Cond	(89	89	0:	0	0	: Wall Cond	d	0		-132	0.79		70727273	1055	ating
Partition/Door	()	0	0:	0	0	: Partition/[Door	0		(0.00	Diffuser	1,303		1,303
Floor	()	0	0:	0	0	Floor		0		(0.00	Terminal	1,303		1,303
Adjacent Floor	() (0	0	0	0	Adjacent	Floor	0		(0.00	Main Fan	1,303	3	1,303
Infiltration	1,690)	1,690	5	967	4	Infiltration		-2,164		-2,164	13.01	Sec Fan	C	VIII	0
Sub Total ==>	15,959	7,621	23,580	68:	15,491	71	: Sub Total	==>	-5,282		-9,350	56.21	Nom Vent	120	0	120
				8			The state of the s					St. 1839/1847/19-13	AHU Vent	120		120
Internal Loads							Internal Loa	ds					Infil	65		65
Lights	1.769	442	2,211	6	1,769	8	Lights		0		(0.00	MinStop/Rh	C		0
People	2.700			8	1,500	7	People		0		Č		Return	1,369		1,369
Misc	2,20			6	2,123	10					ò		Exhaust	185		185
Sub Total ==>	6.674		7/2	20	5,392	25	Sub Total	A.,	0		(Rm Exh	C		0
Sub Total>	0,074	442	2,110	20	3,392	25	Sub Total	7-7	U			0.00	Auxiliary	Č		0
Ceiling Load	1.05	-1.051	0	0	1.014	5	Ceiling Load	4	-514		(0.00	Leakage Dwn	Č		0
Ventilation Load	1,03			9	0	0	Ventilation I		0		-3,968		Leakage Ups	Č		0
Adj Air Trans He			0,000	0:	0	0	Adj Air Tran		0		(Leakage Ops			
Dehumid, Ov Siz		103	0	0			Ov/Undr Siz		-4.284		-4.284	32 3350				_
Ov/Undr Sizing	9	1	0	0	0	0	Exhaust He		4,204		405		ENGIN	NEERING C	VC.	
Exhaust Heat	8	-829		-2	·	Ü	OA Preheat						ENGI	NEEKING C	No	
Sup. Fan Heat		02.	1.931	6			RA Preheat				Ċ			Cooling	Hea	ting
Ret. Fan Heat		(0:			Additional F				(% OA	9.2		9.2
Duct Heat Pkup		(0	0:			System Pler				564		cfm/ft²	1.59	1	1.59
Underfir Sup Ht	Pkup		0	0:			Underfir Su	p Ht Pkup			(0.00	cfm/ton	448.14		
Supply Air Leaka	ige	(0	0			Supply Air I	eakage			(0.00	ft²/ton	281.29		
Grand Total ==>	22.60	C 404	34,896	100.00	21.898	100.00	Grand Total		-10,080		-16,633	3 100.00	Btu/hr-ft²	42.66 6	-16	5.79
Grand Total ==>	23,683	6,184	34,896	100.00	21,898		Grand Total		-10,080		-16,633	100.00	No. People	ь		
	T. 10		IG COIL SELI			7 A		4	AREAS			H	EATING COIL			200
	Total Capacity ton MBI				°F gr/lb	Leave °F	°F gr/lb		Gross Total	Glass ft ²	(%)		MBh	Coil Airflow cfm	Ent °F	Lv
Main Clg	2.9 34.9					59.8 5		Floor	818			Main Htg	-13.7		65.4	75.
Aux Clg	0.0	0.0		0.0	0.0	0.0	0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	(0.0	0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.
Total	2.9 34.9							Roof	818	82	10	Humidif	0.0	0	0.0	0.
rotal	2.3 34.3	500						Wall	211	169	1,000	Opt Vent	0.0	0	0.0	0.
								100000000000000000000000000000000000000		0	0		-13.7	o o	0.0	U.
								Ext Door		U	U	Total	-13./			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A26 OFFICE

	C	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL F	PEAK		TEM	PERATURE	s	
Р	eaked a Outs	t Time: ide Air:		/Hr: 9 / 16 HR: 89 / 72 / 8	19	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 55.0 79.2		75.0 68.2
		Space	Plenum	Net	Percent	Space	Percent			Space Peak		Coil Peak	Percent	Return	79.2		68.2
	S	ens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens	Of Total	Ret/OA	79.7		66.9
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	W /	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	s	2.50	110		1.07	ATT	(10)	Envelope Lo	ads	A 700 A		/ //	110	Fn BldTD	0.3		0.0
Skylite Solar	70	0	0	0	0:	0	0			0		/ (0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		0			200		88
Roof Cond		0	1.944	1.944	17	0	0	Roof Con		0		-880					
Glass Solar		4,116	0	4,116	35	7,709	83	Glass Sol		0		0		Α.	IRFLOWS		
Glass/Door Co	ond	1,249	0	1,249	11		-2			-2.764		-2.764					
Wall Cond		0	241	241	2:	0	0		1	0		-118			Cooling		eating
Partition/Door		0	3.00	0	0:	0	0			0		C		Diffuser	420		420
Floor		0		o o	0:	0	0			0		Ċ		Terminal	420		420
Adjacent Floor		0	0	0	0:	0	0	Adjacent	Floor	0		C		Main Fan	420		420
Infiltration		857		857	7		0			-661		-661		Sec Fan	0		0
Sub Total ==>		6,222	2,185	8,407	72	7.511	81			-3,425		-4,423		Nom Vent	20		20
Sub Iolai>		0,222	2,100	0,407	12:	7,511	01	: Oub rotar		0,420		7,720	, , , , , , ,	100 00 00 00 00 00 00 00 00 00 00 00 00	3.737		
								Internal Loa	de					AHU Vent	20		20
Internal Loads								internal Loa	us					Infil	20		20
Lights		655	164	819	7	655	7	Lights		0		C		MinStop/Rh	0		0
People		450	0	450	4	250	3	People		0		0		Return	440		440
Misc		668	0	668	6:	668	7	Misc		0		0	0.00	Exhaust	40		40
Sub Total ==>		1,773	164	1,937	17	1,573	17	Sub Total	==>	0		0	0.00	Rm Exh	0		0
		3000 2573		1870		1000							s sameta	Auxiliary	0		0
Ceiling Load		330	-330	0	0:	167	2	Ceiling Load	1	-140		0	0.00	Leakage Dwn	0		0
Ventilation Loa	d	0	0	857	7	0	0	Ventilation I		0		-661	11.94	Leakage Ups	0		0
Adj Air Trans H		0		0	0:	0	- 5	Adj Air Tran		0				Leanage ops			
Dehumid. Ov S		U		0	0:	U	· ·	Ov/Undr Siz		-530		-530	2	-			
Ov/Undr Sizing	izing	0		0	0:	0	0			-550		78		FNO	IEEDING O		
Exhaust Heat		U	-184	-184	-2	0	U	OA Preheat				,,		ENGI	NEERING C	KS	
Sup. Fan Heat			-104	622	5:			RA Preheat				Č			Cooling	Hea	itina
Ret. Fan Heat			0	0	0:			Additional F				Ċ		% OA	4.8		4.8
			0	0	0:			System Plea				Č		cfm/ft²	1.68		1.68
Duct Heat Pkup			U	0	0:			Underfir Su				Ċ		cfm/ton	432.64		1.00
Underfir Sup H			0	0	0:								2 37.07.70		0.0000000000000000000000000000000000000		
Supply Air Leal	kage		U	U	0;			Supply Air I	.eakage				0.00	ft²/ton	257.74		
Grand Total ==	>	8,326	1,835	11,640	100.00	9,251	100.00	Grand Total	==>	-4,095		-5,537	100.00	Btu/hr-ft² No. People	46.56 1	-1:	5.02
			COOLING	COIL SELI	ECTION		<i>=</i> x	¥ <i>=</i>	\vdash	AREAS		1	Н	EATING COIL	SELECTIO	N	
	Total	al Capacity	Sens Cap.	Coil Airflow		DB/WB/HR	Leave	DB/WB/HR	7	Gross Total	Glass	.			Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm		°F gr/lb	°F	°F gr/lb	197	Gross rotal	ft ²	(%)		MBh	cfm	°F	
							100		5533	(0.0000)	100	1,00	S 15940			2202	-22
Main Clg	1.0	11.6	10.4	420			55.0 5		Floor	250			Main Htg	-3.8		66.9	75.0
Aux Clg	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	C	0.0	0.0	0.0	0.0 0.0	Int Door	0			Preheat	0.0	0	0.0	0.0
Total	1.0	11.6							Roof	250	0	0	Humidif	0.0	0	0.0	0.0
10000000									Wall	187	150		Opt Vent	0.0	0	0.0	0.0
									Ext Door		0	0	Total	-3.8	ő	1960	
									EXT DOOL	U	U	U	rotar	-3.8			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A27 OFFICE

	COOLING	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL PEAK		TEM	PERATURE	S
Pea	ked at Time: Outside Air:		Hr: 9/16 R: 89/72/8	9 :	Mo/Hr: OADB:	12 / 16 73			Mo/Hr: OADB:	Heating Design 40		SADB Ra Plenum	Cooling 55.0 79.1	Heating 75.0 68.3
	Space	Plenum	Net	Percent:	Space	Percent			Space Peak	Coil Pea	k Percent	Return	79.1	68.3
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		50 5000000000	Ret/OA	79.6	66.9
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h			Fn MtrTD	0.1	0.0
Envelope Loads	Dium	Ditta	Dita	(70)	Diam	(70)	Envelope Lo	ade	Diam	Dia.	(/0)	Fn BldTD	0.3	0.0
Skylite Solar	0	0	0	0	0	0	Skylite So		0		0.00	Fn Frict	0.9	0.0
Skylite Cond	0	0	0	0:4	o o	0	Skylite Co		0		0.00	FILTIO	0.0	0.0
Roof Cond	0	1.867	1.867	16	o o	0	Roof Con		0					
Glass Solar	4.034	0,007	4.034	36	7,528	83	Glass Sol		0		0.00	Δ1	RFLOWS	
Glass/Door Cond		0	1,202	11	-155	-2			-2.660		0.00			
Wall Cond	1,202	233	233	2:	-133	0	Wall Cond		-2,000	-11			Cooling	Heatin
Partition/Door	0	233	0	0:	0	0	Partition/E	5	0		0 0.00	Diffuser	410	41
Floor	0		ő	0:	0	0	Floor	7001	0		0.00	Terminal	410	41
Adjacent Floor	0	0	0	0:	0	0	Adiacent	Eleer	0		0.00	Main Fan	410	
Infiltration	822	U	822	7:	-36	0	Infiltration	FIOOI	-635			Sec Fan	0	
	20000000	0.400	100000000000000000000000000000000000000	257.000	27,770	1750.0			(7.77.7)					
Sub Total ==>	6,058	2,100	8,158	72	7,337	81	Sub Total	==>	-3,295	-4,25	5 78.98	Nom Vent	20	
							101 111	20				AHU Vent	20	
Internal Loads							Internal Loa	ds				Infil	19	
Lights	655	164	819	7:	655	7	Lights		0		0.00	MinStop/Rh	0	
People	450	0	450	4:	250	3	People		0		0.00	Return	429	42
Misc	641	0	641	6	641	7	Misc		0		0.00	Exhaust	39	3
Sub Total ==>	1,747	164	1,910	17	1,547	17	Sub Total	1	0		0.00	Rm Exh	0	
Sub Total>	1,747	104	1,510	117	1,547		Sub rotar		U		0.00	Auxiliary	0	
Ceiling Load	313	-313	0	0:	159	2	Ceiling Load		-133		0.00	Leakage Dwn	0	
Ventilation Load	0	-313	857	8:	0	0	Ventilation L		0			Leakage Ups	0	
	. 150	U	1023		00.7%	500			0		0 0	Leakage Ups	U	
Adj Air Trans Hea	n		0	0	0	0	Adj Air Tran							
Dehumid. Ov Sizi			0	0;	7740		Ov/Undr Siz		-547	-54		223,000,000,000,000		NAME OF
Ov/Undr Sizing	0	470	0	0:	0	0	Exhaust Hea				5 -1.40	ENGIN	IEERING CI	KS
Exhaust Heat		-178	-178	-2 :			OA Preheat				0.00		Cooling	Heating
Sup. Fan Heat		1207	608	5;			RA Preheat				0.00	% OA	4.9	4.9
Ret. Fan Heat		0	0	0:			Additional F				0.00			
Duct Heat Pkup		0	0	0:			System Pler				0.00	cfm/ft²	1.71	1.71
Underflr Sup Ht P	2.25		0	0			Underfir Su				0.00	cfm/ton	433.49	
Supply Air Leakag	je	0	0	0:			Supply Air L	.eakage			0.00	ft²/ton	253.64	
Grand Total ==>	8,118	1,772	11,355	100.00	9,042	100.00	Grand Total	==>	-3,974	-5,38	7 100.00	Btu/hr-ft² No. People	47.31 1	-15.30
		COOLING	COIL SELE	ECTION		7 A	7	-	AREAS	8	Н	EATING COIL	SELECTIO	N
	Total Capacity		oil Airflow		DB/WB/HR	Leave	DB/WB/HR	G	ross Total	Glass			Coil Airflow	Ent L
	ton MBh	MBh	cfm	77.700000000000000000000000000000000000		°F	°F gr/lb		, out total	ft² (%)		MBh	cfm	°F
Main Clg	1.0 11.4	10.1	410	81.0 61.6	5 51.9	55.0 5	1.5 51.9	Floor	240		Main Htg	-3.7	410	66.9 75
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
Opt Vent	0.0 0.0	0.0	0		5 935		0.0 0.0	Int Door	0		Preheat	0.0	0	0.0
Total	1.0 11.4							ExFIr Roof	0 240	0 0	Humidif	0.0	0	0.0
								Wall	180	144 80	Opt Vent	0.0	0	0.0
								Ext Door	0	0 0	Total	-3.7		

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A28 OFFICE

	С	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL F	PEAK		TEM	PERATURE	S	
P		at Time: side Air:		/Hr: 9 / 17 HR: 88 / 71 / 8	36	Mo/Hr; OADB:				Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 61.9 76.2		75.0 69.4
		Space	Plenum	Net	Percent	Space	Percent			Space Peak		Coil Peak	Percent	Return	76.2		69.4
	5	Sens. + Lat.	Sens. + Lat _	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	76.4		69.0
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	-	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	223	Dium	Dium	Bian	(70)	Blum	(10)	Envelope Lo		Didili		Blun	(70)	Fn BldTD	0.3		0.0
Skylite Solar	5	0	0	0	0	0	0	Skylite Sc		0	/ /		0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:		0	Skylite Co		0			0.00	rn rnct	0.9		0.0
Roof Cond		0	1.664	1.664	6	0	0	Roof Con		0		-881					=
Glass Solar		n	0,004	19,145	67	19.145	83	Glass Sol		0	1	-00			IRFLOWS		
Glass/Door Co	and the	19,145 2.057	0	2.057			9			-4.729		-4.729			IKFLOWS		
Wall Cond	na		404		7:	2,057	0	Wall Cond		-4,729					Cooling	He	eating
		0	404	404	1:					-		-210		Diffuser	1,598		1,598
Partition/Door		0		0	0:	0	0		Joor	0		C		Terminal	1,598		1,598
Floor		0		0	0	0	0			0		C		Main Fan	1,598		1,598
Adjacent Floor		0	0	0	0	0	0	Adjacent		0		0					
Infiltration		547		547	2:	275	1			-635		-635		Sec Fan	C		0
Sub Total ==>		21,749	2,068	23,817	83:	21,477	93	Sub Total	==>	-5,364		-6,455	48.92	Nom Vent	20		20
					8			17707 993.7						AHU Vent	20)	20
Internal Loads								Internal Loa	ds					Infil	19		19
Lights		655	164	819	3:	655	3	Lights		0		0	0.00	MinStop/Rh	C)	0
People		450	0	450	2	250	1	People		0		Ċ		Return	1,617		1,617
Misc		673	0	673	2		3	Misc		0		Č		Exhaust	39		39
		1,778	164		7		7	-	A /	0		C		Rm Exh	0		0
Sub Total ==>		1,778	164	1,942	1:	1,578		Sub Total	7-7	U			0.00	Auxiliary	C		0
Ceiling Load		91	-91	0	0	91	0	Ceiling Load		-45		C	0.00	Leakage Dwn	Ċ		0
Ventilation Load						-	100	Ventilation I		-43		-661					0
		0	0	569	2:	0	0			0		-001	C 2777545	Leakage Ups	C		U
Adj Air Trans H		0		0	0	0	0	Adj Air Tran		0.79			3				
Dehumid. Ov Si	izing			0	0 ;			Ov/Undr Siz		-6,103		-6,103					
Ov/Undr Sizing		0		0	0:	0	0	Exhaust He				25		ENGI	NEERING C	KS	
Exhaust Heat			-52	-52	0;			OA Preheat				C					144055
Sup. Fan Heat				2,367	8:			RA Preheat				C			Cooling	неа	ating
Ret. Fan Heat			0	0	0:			Additional F				0		% OA	1.3		1.3
Duct Heat Pkup			0	0	0			System Pler				C	3 33377778	cfm/ft²	6.66		6.66
Underfir Sup Hi	Pkup			0	0			Underfir Su	p Ht Pkup			C	0 000000	cfm/ton	669.49		
Supply Air Leak	cage		0	0	0 :			Supply Air I	.eakage			C	0.00	ft²/ton	100.55		
							///						A MANAGEMENT	Btu/hr-ft ²	119.35	-4	3.71
Grand Total ==:	>	23,618	2,088	28,643	100.00	23,146	100.00	Grand Total	==>	-11,511		-13,194	100.00	No. People	1		
			COOLING	COIL SELI	ECTION		7 À	7		AREAS	8		НЕ	EATING COIL	SELECTIO	N	
	Total	al Capacity	Sens Cap.	Coil Airflow	Enter	DB/WB/HR	Leave	DB/WB/HR	10	Gross Total	Glass	s		Capacity	Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm		°F gr/lb	⊸°F	°F gr/lb			ft ²	(%)		MBh	cfm	°F	
	0.4		07.0	4 500	777.00	-26 57000	64.0 =		823	040		100000		10 =	4.500	00.0	75.0
Main Clg	2.4	28.6	27.9	1,598			61.9 5		Floor	240			Main Htg	-10.5		69.0	75.0
Aux Clg	0.0	0.0	0.0	(3 - 16153 B	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	C	0.0 0	0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	2.4	28.6							Roof	240	0	0	Humidif	0.0	0	0.0	0.0
1000000	2000								Wall	320	256		Opt Vent	0.0	0	0.0	0.0
									Ext Door		0	0	Total	-10.5		1960	
									EXT DOOL	U	U	U	iotai	-10.5			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A29 OFFICE

	С	OOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL P	PEAK		TEM	PERATURE	s	
Р	Peaked a Outs	at Time: side Air:		/Hr: 9/10 HR: 79/62/5	8	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating 40	Design		SADB Ra Plenum	Cooling 55.0 76.6		75.0 68.0
		Space	Plenum	Net	Percent	Space	Percent			Space Peak	(Coil Peak	Percent	Return	76.6		68.0
		Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens	Of Total	Ret/OA	76.7		66.5
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	7 /	Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	is	2.50 mm/s/s	1119	- 7	1.00	47	1,00	Envelope Lo	oads	77		/ /	1.07	Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0			0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		0					202
Roof Cond		0	591	591	6	0	0	Roof Con		0		-838					
Glass Solar		6,371	0	6,371	63	6.946	83	Glass Sol		0		0		A	IRFLOWS		
Glass/Door Co	ond	92	0	92	1	-436	-5	Glass/Do	or Cond	-2.069		-2.069		7.0			
Wall Cond	7.000	247	98	345	3:		4	: Wall Cond	1	-483		-683			Cooling		eating
Partition/Door	13	0	12.0	0	0:		0			0		0		Diffuser	378		378
Floor		0		0	0:	0	0			0		Ö		Terminal	378		378
Adjacent Floo	r	0	0	0	0:	0	0	Adjacent	Floor	0		0		Main Fan	378	2	378
Infiltration		290		290	3	-87	-1			-635		-635		Sec Fan	C	200	0
Sub Total ==>		7.000	689	7.689	76	6.745	81			-3,186		-4,224		Nom Vent	20		20
Sub Iolai>		7,000	009	7,000	70:	0,745	01	: Oub rotar		-5,100		7,22	01.00	100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.707		
								Internal Loa	de					AHU Vent	20		20
Internal Loads								internal Loa	us					Infil	19		19
Lights		541	135	676	7	614	7	Lights		0		0		MinStop/Rh	C		0
People		376	0	376	4	219	3	People		0		0		Return	397		397
Misc		558	0	558	6:	673	8	Misc		0		0	0.00	Exhaust	39	V())	39
Sub Total ==>	>	1,475	135	1,610	16	1,506	18	Sub Total	==>	0		0	0.00	Rm Exh	C	56	0
		30.00		10.70						250			4 25117-50	Auxiliary	C	1	0
Ceiling Load		122	-122	0	0	84	1	Ceiling Load	d /	-154		0	0.00	Leakage Dwn	C	ří	0
Ventilation Loa	d	0	0	302	3	0	0	Ventilation I	oad	0		-661	12.69	Leakage Ups	C	ri i	0
Adj Air Trans H	leat	0		0	0:	20 10.7%	0	Adj Air Tran		0		0		Lounago opo			~
Dehumid. Ov S		0		0	0			Ov/Undr Siz		-414		-414	7.94	-			_
Ov/Undr Sizing		0		0	0	0	0			-414		87		FNO	IEEDING O	V0	
Exhaust Heat	,	U	-69	-69	-1		U	OA Preheat				0,		ENGI	NEERING C	NS.	
Sup. Fan Heat			-03	560	6			RA Preheat				0			Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional F				Ö		% OA	5.3	-5350	5.3
Duct Heat Pkur			0	0	0:			System Plen				Ö		cfm/ft²	1.58		1.58
Underfir Sup H			U	0	0:			Underfir Su				Ö	2 300000000	cfm/ton	449.60		1.00
			0	0	0			# 15 H. M. W. W. B. W. W. W. W.				0	2 37.57.70	ft²/ton	285.38		
Supply Air Lea	ıkage		U	U	0			Supply Air I	_eakage			U	0.00				. 70
Grand Total ==	=>	8,596	633	10,092	100.00	8,335	100.00	Grand Total	==>	-3,754		-5,212	100.00	Btu/hr-ft² No. People	42.05 1	-1	4.76
			COOLING	COIL SELI	CTION		ĒÀ			AREAS	8		HE	ATING COIL	SELECTIO	N	_
	Tot	al Capacity		Coil Airflow		r DB/WB/HR	Leave	DB/WB/HR	7	Gross Total	Glass				Coil Airflow	Ent	Lvg
	ton	MBh	MBh	cfm		°F gr/lb	°F	°F gr/lb	1		ft ²	(%)		MBh	cfm	°F	
2000 200					Harallona		areallise ar	- Jan	323	2.22		10000	5 17900			anaron (S)	200
Main Clg	0.8	10.1	9.5	378			55.0 4		Floor	240			Main Htg	-3.5		66.5	75.0
Aux Clg	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	C	0.0	0.0 0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	0.8	10.1							Roof	240	0	0	Humidif	0.0	0	0.0	0.0
nacaette		. X.1.7.1.1							Wall	320	112	120	Opt Vent	0.0	0	0.0	0.0
									Ext Door		0	200000	Total	-3.5	Ĭ.	7000	
									EXT DOOL	U	U	U	rotar	-3.5			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A30 OFFICE

	co	OLING C	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL PE	AK		TEM	PERATURE	s	
Pea	ked at 1 Outside			/Hr: 9 / 16 /HR: 89 / 72 / 8	9 :	Mo/Hr: OADB:	12 / 16 73			Mo/Hr: OADB:	Heating D 40	esign		SADB Ra Plenum	Cooling 55.0 79.1		75.0 68.3
		Space	Plenum	Net	Percent	Space	Percent			Space Peak			Percent	Return	79.1		68.3
	Ser	s. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		ot Sens		Ret/OA	79.6		66.9
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		4.	Btu/h		Btu/h	(%)	Fn MtrTD Fn BldTD	0.1		0.0
Envelope Loads Skylite Solar		0	0	0	0:	0	0	Skylite So		0		0	0.00	Fn Frict	0.9		0.0
Skylite Solar Skylite Cond		0	0	0	0:	0	0	Skylite St		0		0		Fn Frict	0.9		0.0
Roof Cond		0	1.867	1,867	16	0	0	Roof Con		0		-846	15.70				_
Glass Solar		4.034	0	4,034	36	7,528	83	Glass Sol		0		-040	0.00	A	IRFLOWS		
Glass/Door Con	d	1.202	0	1.202	11	-155	-2			-2.660		-2.660					
Wall Cond		0	233	233	2:	0	0			2,000		-114	2.11		Cooling		eating
Partition/Door		Ö	200	0	0:	0	0		75	0		0		Diffuser	410)	410
Floor		0		0	0:	0	0	Floor		0		0		Terminal	410)	410
Adjacent Floor		0	0	0	0:	0	0	Adjacent	Floor	0		0		Main Fan	410)	410
Infiltration		822		822	7:	-36	0			-635		-635	11.79	Sec Fan	0)	0
Sub Total ==>		6.058	2,100	8,158	72	7,337	81	*		-3.295		-4,255	78.98	Nom Vent	20		20
Gub rotar		0,000	2,100	0,100		1,001	01							AHU Vent	20		20
Internal Loads								Internal Loa	ds					Infil	19		19
		055	404	040	7	0.00	_					0	0.00	MinStop/Rh	0		0
Lights		655 450	164 0	819 450	4:	655	/	Lights		0		0		Return	429		429
People		641	0	641		250 641	3 7	People		0		0		200000000000000000000000000000000000000	39		39
Misc					6:			Misc						Exhaust	0		0
Sub Total ==>		1,747	164	1,910	17	1,547	17	Sub Total	==>	0		0	0.00	Rm Exh	100		
		828227	70760	1920						400			0.00	Auxiliary	0		0
Ceiling Load		313	-313	0	0:	159	2	Ceiling Loa		-133		0		Leakage Dwn	0		0
Ventilation Load		0	0	857	8;	0	0	Ventilation I		0		-661	12.28	Leakage Ups	0)	0
Adj Air Trans Hea		0		0	0	0	0	Adj Air Tran		0		0	10000				
Dehumid. Ov Sizi	ng			0	0;			Ov/Undr Siz		-547		-547	10.15				
Ov/Undr Sizing		0	727	_0	0:	0	0	Exhaust He				75		ENGI	NEERING C	KS	
Exhaust Heat			-178	-178	-2:			OA Preheat				0			Cooling	Hai	ating
Sup. Fan Heat			127	608	5;			RA Preheat				0		% OA	4.9	пеа	4.9
Ret. Fan Heat			0	0	0:			Additional F				0	0.00	cfm/ft²	1.71		1.71
Duct Heat Pkup			0	0	0:			System Plea				0	3333333	100 TO 10			1.71
Underfir Sup Ht F				0				Underfir Su				7.	0.00	cfm/ton	433.49		
Supply Air Leaka	ge		0	0	0:			Supply Air I	Leakage			0	0.00	ft²/ton	253.64		-
Grand Total ==>		8,118	1,772	11,355	100.00	9,042	100.00	Grand Total	==>	-3,974		-5,387	100.00	Btu/hr-ft² No. People	47.31 1	-1	15.30
			COOLING	COIL SELE	CTION		ĒÀ		-	AREAS	3	7	н	EATING COIL	SELECTIO	N	
	Total ton	Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter	DB/WB/HR F gr/lb	Leave	DB/WB/HR °F gr/lb		Gross Total	Glass	(%)			Coil Airflow cfm	Ent °F	
Main Clg	1.0	11.4	10.1	410	81.0 61.	6 51.9	55.0 5	1.5 51.9	Floor	240			Main Htg	-3.7	410	66.9	75.
Aux Clg	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.
Opt Vent	0.0	0.0	0.0	0	0.0 0.	0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.
Total	1.0	11.4							Roof	240	0	0	Humidif	0.0	0	0.0	0.
routi	1.0	11.4							Wall	180	144		Opt Vent	0.0	0	0.0	0.0
									100000000000000000000000000000000000000		0	9500	Total	-3.7		7500	
									Ext Door	U	U	U	rotar	-3.7			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A31 OFFICE

	COOLING O	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL PEAK		TEMI	PERATURE	s
Peaked at Time: Outside Air:		Mo/Hr: 9 / 16 OADB/WB/HR: 89 / 72 / 89		9 :	Mo/Hr: 12 / 16 OADB: 73				Mo/Hr: OADB:	Heating Design 40		SADB Ra Plenum	Cooling 55.0 79.2	Heating 75.0 68.2
	Space	Plenum	Net	Percent	Space	Percent			Space Peak	Coil Book	Percent	Return	79.2	68.2
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens			Ret/OA	79.7	66.9
	Btu/h	Btu/h	Btu/h	(%)	Sensible Btu/h	Annabatasa			Space Sens Btu/h			Fn MtrTD	0.1	0.0
Envelope Loads	Diu/II	Dium	Blu/II	(70)	Diu/II	(%)	Envelope Lo	ande	Diu/II	Diu/i	(70)	Fn BldTD	0.3	0.0
Skylite Solar	0	0	0	0:	0	0	Skylite So		0		0.00	Fn Frict	0.9	0.0
Skylite Cond	0	0	0	0:4	o o	0	Skylite Co		0			riirriict	0.0	0.0
Roof Cond	0	1.944	1.944	17	o o	0	Roof Con		0					
	Glass Solar 4,116		4.116	35	7,709	83	Glass Sol		0			Δ.	IRFLOWS	
Glass/Door Cond		0	1,249	11:	-161	-2			-2.764	-2.764		^		
Wall Cond	0	241	241	2:	0	0	Wall Cond		2,704	-118			Cooling	Heating
Partition/Door	0	241	0	0:	0	0	Partition/E	5	0	-110		Diffuser	420	42
Floor	0		ő	0:	0	0	Floor	3001	0	Č		Terminal	420	42
Adjacent Floor	0	0	0	0:	0	0	Adiacent	Eleor	0			Main Fan	420	
Infiltration	857	U	857	7:	-37	0	Infiltration		-661	-661		Sec Fan	0	
	32777.0	0.405	0.000		2000	81			-3,425	22/20				
Sub Total ==>	6,222	2,185	8,407	72	7,511	81	Sub Iolai		-3,423	-4,420	19.09	Nom Vent	20	
				1			Internal Loa	45.				AHU Vent	20	
Internal Loads				- 1			internal Loa	us				Infil	20	
Lights	655	164	819	7:	655	7	Lights		0	(0.00	MinStop/Rh	0	
People	450	0	450	4	250	3	People		0	(0.00	Return	440	
Misc	668	0	668	6:	668	7	Misc		0	(0.00	Exhaust	40	
Sub Total ==>	1,773	164	1,937	17	1,573	17	Sub Total	==>	0	(0.00	Rm Exh	0	Y6
oub rotur	1,110	104	1,007		1,010		Cub rotar				0.00	Auxiliary	0	
Ceiling Load	330	-330	0	0:	167	2	Ceiling Load	d /	-140	(0.00	Leakage Dwn	0	ÿ .
Ventilation Load	0	0	857	7	0	0	Ventilation L		0			Leakage Ups	0	
Adi Air Trans Hea	. 1500		0	0:	0	500	Adi Air Tran		0			Leanage ops		
Dehumid. Ov Sizir	han germ		200	20.000	U	U	Ov/Undr Siz		-530					
Ov/Undr Sizing			0	0		0	Exhaust Hea		-550	-550				
Exhaust Heat	0	-184	-184	0:	0	U	OA Preheat			,,		ENGIN	NEERING C	KS
		-104	622	5:			RA Preheat						Cooling	Heating
Sup. Fan Heat		0	0	0:								% OA	4.8	4.8
Ret. Fan Heat		0	0	0:			Additional R System Pler					cfm/ft²	1.68	1.68
Duct Heat Pkup	uros.	U	0	0:								100000000000000000000000000000000000000	432.64	1.00
Underfir Sup Ht P	2.25		0				Underfir Su				0.00	cfm/ton		
Supply Air Leakag	je	0	0	0			Supply Air L	_eakage			0.00	ft²/ton	257.74	
Grand Total ==>	8,326	1,835	11,640	100.00	9,251	100.00	Grand Total	==>	-4,095	-5,537	100.00	Btu/hr-ft² No. People	46.56 1	-15.02
		COOLING	COIL SELE	CTION		ĒÀ	14 7	-	AREAS	1	н	EATING COIL	SELECTIO	N
	Total Capacity	Sens Cap.	Coil Airflow	Enter	DB/WB/HR	Leave	DB/WB/HR		Gross Total	Glass			Coil Airflow	Ent L
	ton MBh	MBh	cfm	77.700000000000000000000000000000000000		°F	°F gr/lb			ft² (%)		MBh	cfm	°F
Main Clg	1.0 11.6	10.4	420	81.0 61.0	5 51.8	55.0 5	1.5 51.8	Floor	250		Main Htg	-3.8	420	66.9 75
Aux Cla	0.0 0.0	0.0	0		1000		0.0 0.0	Part	0		Aux Htg	0.0	0	0.0 0
Opt Vent	0.0 0.0	0.0	0		5 935		0.0 0.0	Int Door	0		Preheat	0.0	0	0.0
Total	1.0 11.6							ExFIr Roof	0 250	0 0	Humidif	0.0	0	0.0
								Wall	187	150 80	Opt Vent	0.0	0	0.0
								Ext Door		0 0	Total	-3.8		
								EAL DOOL	v	0 0	, Juli	-5.0		

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A32 HALLWAY

	COOLING	COIL PEAK		(LG SPACE		HEATING (COILF	EAK		TEMPERATURES					
Peaked at Time: Outside Air: OADB			Mo/Hr: 9 / 17 OADB/WB/HR: 88 / 71 / 86			10 / 17 80			Mo/Hr: OADB:		Design		SADB Ra Plenum	Cooling 55.0 78.0		75.0 68.0
	Space	Plenum	Net	Percent	Space	Percent			Space Peak		Coil Peak	Percent	Return	78.0		68.0
	Sens. + Lat.	Sens. + Lat	Total	Of Total	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	78.0		68.0
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	7 /	Btu/h		Fn MtrTD	0.1		0.0
Envelope Loads	Diani	Dida	Diam	(70)	Dia.	1,01	Envelope Loads		Diam'		Dian	(70)	Fn BldTD	0.3		0.0
Skylite Solar	0	0	0	0:	0	0	Skylite Solar		0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond	0	0	ő	0:/	0	0/	Skylite Cond		0		Ö		THITTIES	0.0		0.0
Roof Cond	0	838	838	7	0	0	Roof Cond		0		-437					_
Glass Solar	7,606	0	7,606	64 ·	8,738	85	Glass Solar		0		0		Α	IRFLOWS		
Glass/Door Con	1,241	0	1,241	10:	525	5 :	Glass/Door Co	ond	-2,852		-2,852	58.11		0		
Wall Cond	0	235	235	2:	0	0:	Wall Cond		0		-121	2.46		Cooling		eating
Partition/Door	0		0	0:	0	0:	Partition/Door	5(1)	0		0	0.00	Diffuser	467		467
Floor	0		0	0:	0	0:	Floor		0		0	0.00	Terminal	467		467
Adjacent Floor	0	0	0	0	0	0	Adjacent Floo	or	0		0	0.00	Main Fan	467		467
Infiltration	392		392	3 :	57	1 :	Infiltration		-331		-331	6.74	Sec Fan	0)	0
Sub Total ==>	9,239	1,073	10,312	86:	9,321	90:	Sub Total ==>	>	-3,183		-3,741	76.21	Nom Vent	0)	0
													AHU Vent	0)	0
Internal Loads						- 1	Internal Loads						Infil	10)	10
Lights	263	66	329	3:	263	3	Lights		0		0	0.00	MinStop/Rh	0)	0
People	0	0	0	0:	0	0	People		0		Ö		Return	477		477
Misc	640	o o	640	5:	640	6	Misc	/	640		640		Exhaust	10		10
Sub Total ==>	903	66	969	8	903	9	Sub Total ==>		640		640		Rm Exh	0		0
Sub Iolai>	903	00	303	0:	303	1 1	Sub Total		040		040	-13,04	Auxiliary	0)	0
Ceiling Load	121	-121	0	0:	81	1	Ceiling Load		-79		0	0.00	Leakage Dwn	0		0
Ventilation Load	0	0	0	0:	0		Ventilation Load	1	0				Leakage Ups	o		0
Adi Air Trans Hea		Ü	0	0:	0		Adj Air Trans He		0		o		Leakage Ops		500	
Dehumid. Ov Sizi	071 UEV.		0	0	U		Ov/Undr Sizing	at	-1,265		-1,265	2				
Ov/Undr Sizing	0		0	0:	0	0	Exhaust Heat		-1,203		22		ENGU	IEEDING O	WC	
Exhaust Heat	U	-34	-34	0:	U		OA Preheat Diff.			22			ENGI	INEERING CKS		
Sup. Fan Heat		-54	693	6:			RA Preheat Diff.				Ö			Cooling	Hea	iting
Ret. Fan Heat		0	0	0:			Additional Reheat			0			% OA	0.0		0.0
Duct Heat Pkup		0	0	0:			System Plenum				-564		cfm/ft²	3.74		3.74
Underfir Sup Ht F	kup	8500	0	0:		:	Underfir Sup Ht	Pkup			0	0.00	cfm/ton	469.82		
Supply Air Leaka	C 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0	0	0:			Supply Air Leak				0	0.00	ft²/ton	125.63		
	9-						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	W					Btu/hr-ft²	95.52	-2	8.78
Grand Total ==>	10,262	985	11,940	100.00	10,304	100.00	Grand Total ==>	+	-3,887		-4,908	100.00	No. People	0		
		COOLING	COIL SELE	CTION		Ī À	7 7 7		AREAS	3		н	ATING COIL	SELECTIO	N	
	Total Capacity	Sens Cap. (Coil Airflow	Enter D	B/WB/HR	Leave	DB/WB/HR		Gross Total	Glass		08.50	Capacity	Coil Airflow	Ent	Lvg
	ton MBh	MBh	cfm		gr/lb	°F	°F gr/lb []			ft²	(%)		MBh	cfm	°F	
Main Clg	1.0 11.9	11.7	467	79.4 60.7	50.2	55.0 51	.1 50.2 F	Floor	125			Main Htg	-3.6	467	68.0	75.0
Main Cig Aux Cig	0.0 0.0	0.0	467		0.0			-ioor 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		nt Door ExFlr	0			Preheat	0.0	0	0.0	0.0
Total	1.0 11.9						F	Roof	125	0	0	Humidif	0.0	0	0.0	0.0
							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2007/19/19/19	122	2 20 4	10.0	12000000000000	0.0		0.0	0.0
							V	Nall	193	154	80	Opt Vent	0.0	0	0.0	0.0

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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By ACADEMIC

A33 WORKROOM

	OIL PEAK		CLG SPACE	PEAK			HEATING C	OIL PEA	λK		TEMPERATURES						
Pe	aked at Ti Outside		Mo/Hr: 7 / 17 OADB/WB/HR: 87 / 70 / 87		7	Mo/Hr: OADB:		:		Mo/Hr: I		leating Design 40		SADB	Cooling 57.8		ating 75.0
		Littleway C	200000	20700		22222	120000000			5289000000000000000000000000000000000000	102,700			Ra Plenum	82.9		66.7
		Space	Plenum	Net	Percent	Space	Percent	:		Space Peak			Percent	Return	82.9		66.7
	Sen	s. + Lat.	Sens. + Lat	Total	Of Total :	Sensible	Of Total		7	Space Sens	Tot	Sens		Ret/OA	83.6		62.4
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		J	Btu/h		Btu/h	(%)	Fn MtrTD	0.1		0.0
Envelope Loads			///					Envelope Lo						Fn BldTD	0.3		0.0
Skylite Solar		0	0	0	0:	0	0	Skylite So		0		0		Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0 0		1,187					_
Roof Cond Glass Solar		0	2,809	2,809	32		0 0 Roof Cond 0 0 Glass Solar			0		1,107			IDEL OWE		
Glass/Door Co		0	0	0	0:		0 0 Glass/Door Cond			0		0	0.00		AIRFLOWS		
Wall Cond	IU	1,494	311	1,805	21:	1.494	32			-944		1,153			Cooling	He	eating
Partition/Door		0	311	0	0:	0	0			0		0		Diffuser	249)	249
Floor		0		0	0:	ő	0		3001	0		0		Terminal	249		249
Adjacent Floor		0	0	0	0:	0	0	Adjacent	Floor	0		0		Main Fan	249		249
Infiltration		802	U	802	9:	381	8			-944		-944		Sec Fan	0)	0
Sub Total ==>		2,295	3,120	5,416	63:	1,874	40	: Sub Total		-1,888	- 1	3,284		Nom Vent	40		40
Sub Iolai>		2,200	3,120	3,410	03:	1,074	40	: Out rotal		1,000		0,20	COMMON.	AHU Vent	40		40
Internal Loads								Internal Loa	ds					Infil	29		29
		The second		000000000000000000000000000000000000000										10000000			29
Lights		1,289	322	1,611	19	1,289	27	Lights		0		0		MinStop/Rh	0		
People		180	0	180	2:	100	2	People		0		0		Return	277		277 69
Misc		556	0	556	6:	556	12			0		0		Exhaust	69		09
Sub Total ==>		2,025	322	2,347	27	1,945	41	Sub Total	==>	0		0	0.00	Rm Exh Auxiliary	0		0
Ceiling Load		892	-892	0	0:	892	19	Ceiling Load	d	-379		0	0.00	Leakage Dwn	Ö		0
Ventilation Load	Ĕ	0	0	1,123	13	0	0	Ventilation L		0	-1,323			Leakage Ups	0)	0
Adj Air Trans He	at	0		0	0:	0	0	Adj Air Tran	s Heat	0		0		Lounago opo			~
Dehumid, Ov Si				0	0:			Ov/Undr Siz		-238		-238	5.17	-			
Ov/Undr Sizing	9	0		0	0:	0		0 Exhaust Heat				253		ENGI	NEERING C	KC	
Exhaust Heat			-596	-596	-7:		OA Preheat					0		LIVOII	VEEKING C	No	
Sup. Fan Heat				369	4:			RA Preheat	Diff.			0	0.00		Cooling	Hea	ating
Ret. Fan Heat			0	0	0:			Additional R	Reheat		0		0.00	% OA 16.1			
Duct Heat Pkup			0	0	0:			System Pler	num Heat			-8	0.17	cfm/ft²	0.70		0.70
Underflr Sup Ht	Pkup			0	0:			Underfir Su	p Ht Pkup			0	0.00	cfm/ton	344.92		
Supply Air Leak	age		0	0	0:			Supply Air L	_eakage			0	0.00	ft²/ton	494.81		
Grand Total ==>	Si .	5,211	1,955	8,658	100.00	4,710	100.00	Grand Total	==>	-2,505		4,599	100.00	Btu/hr-ft² No. People	24.25	-	-9.71
			COOLING	G COIL SELI	CTION		ĒÀ	7 7		AREAS			н	EATING COIL	SELECTIO	N	_
	Total C	apacity	Sens Cap.	Coil Airflow		DB/WB/HR	Leave	DB/WB/HR	" J	Gross Total	Glass		35.00		Coil Airflow	Ent	t Lv
	ton	MBh	MBh	cfm		°F gr/lb	°F	°F gr/lb			ft² (%	6)		MBh	cfm	°F	
Main Clg	0.7	8.7	7.6	249	84.9 66	.5 69.0	57.8 5	5.3 61.9	Floor	357			Main Htg	-3.5	249	62.4	75.
Aux Clg	0.0	0.0	0.0			0.0		0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0	C				0.0 0.0	Int Door	0		- 10	Preheat	0.0	0	0.0	0.
100			3.0					5.0	ExFir	0					·		
Total	0.7	8.7							Roof	357	0	0	Humidif	0.0	0	0.0	0.
									Wall	352	0	0	Opt Vent	0.0	0	0.0	0.
									Ext Door	0	0	0	Total	-3.5			

Project Name: Sunnylands

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By ACADEMIC

A34 MEETINGROOM 2

	OOLING C	OIL PEAK			CLG SPACE	HEATING C	OIL PEA	K		TEMPERATURES							
Peaked at Time: Mo/Hr: 9 / 16 Outside Air: OADB/WB/HR: 89 / 72					9 :	Mo/Hr: 9 / 16 9 OADB: 89				Mo/Hr: I OADB:	Heating Des 40	ign		SADB Ra Plenum	Cooling 55.9 82.4		75.0 66.7
	5	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peak Space Sens	0.77	100000	Percent Of Total	Return Ret/OA	82.4 84.9		66.7 57.3
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)	- A		Btu/h	E	3tu/h	(%)	Fn MtrTD	0.1		0.0
Envelope Load			40					Envelope Lo					Fn BldTD	0.3		0.0	
Skylite Solar		0	0	0	0:	0	0	Skylite So		0		0	0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0		0					
Roof Cond		0	1,918	1,918	20	0	0	Roof Con		0		-874			IDE: 0140		
Glass Solar		0	0	0	0;	0	0	Glass Sol				0	0.00	A	IRFLOWS		
Glass/Door Co	ond	0	0	0	0;	0	0	Glass/Doo		0		0			Cooling	He	eating
Wall Cond		2,213	460	2,672	28:	2,213	46			-1,507	-1	,841		Diffuser	229		229
Partition/Door		0		0	0:	0	0		oor	0		0	0.00	Terminal	229		229
Floor	2	0		0	0:	0	0			0		0		Main Fan	229		229
Adjacent Floo Infiltration	E.	673	0	673	0	334	0	Adjacent I	Floor	-696		-696	0.00 12.22	Sec Fan	0		0
		0.4250.5000	0.070	723030	257.00			 1000000000000000000000000000000000000		-2,202							
Sub Total ==>	•	2,885	2,378	5,264	55	2,547	53	Sub Total		-2,202	0	3,411	59.91	Nom Vent	80		80
					1			Internal Loa	do					AHU Vent	80		80
Internal Loads									us					Infil	21		21
Lights		759	190	949	10	759	16	Lights		0		0	0.00	MinStop/Rh	0		0
People		900	0	900	9:	500	10	People		0		0		Return	250		250
Misc		396	0	396	4:	396	8	Misc	. /	0		0	0.00	Exhaust	101		101
Sub Total ==>		2,055	190	2,245	23	1,655	34	Sub Total	==>	0		0	0.00	Rm Exh Auxiliary	0		0
Ceiling Load		619	-619	0	0	619	13	Ceiling Load		-279		0	0.00	Leakage Dwn	Ö		0
Ventilation Loa	d	0	0	2,558	27	0	0	Ventilation Load		0			46.46	Leakage Ups	0)	0
Adj Air Trans H	leat	0	19	0	0:	0	0	Adj Air Trans Heat		0		0		Louising opo			
Dehumid. Ov S				0	0:			Ov/Undr Siz		-19		-19	0.33				
Ov/Undr Sizing		0		0	0:	0	0	Exhaust Hea				373		ENGU	NEERING C	KC	
Exhaust Heat			-827	-827	-9	10.50		OA Preheat				0	0.00	LIVOII	VELICINO C	NO	
Sup. Fan Heat				339	4:			RA Preheat	Diff.			0	0.00		Cooling		ating
Ret. Fan Heat			0	0	0:			Additional R				0	0.00	% OA	35.0		35.0
Duct Heat Pkup	р		0	0	0:			System Plen	um Heat			8	-0.13	cfm/ft²	0.87		0.87
Underfir Sup H	t Pkup			0	0:			Underfir Su	Ht Pkup			0	0.00	cfm/ton	286.31		
Supply Air Lea	kage		0	0	0			Supply Air L	.eakage			0	0.00	ft²/ton	329.50		
Grand Total ==	·>	5.559	1,122	9,578	100.00	4,820	100.00	Grand Total	==>	-2,500	-5	.694	100.00	Btu/hr-ft² No. People	36.42 4	-1	16.93
Crano rotar		0,000	355					¥ <u>=</u>	7			7.00		94 - 10			
	-			COIL SELI			7 . A	DD WOULD	L-,	AREAS			н	EATING COIL			200
	ton	al Capacity MBh	Sens Cap. MBh	Coil Airflow cfm		DB/WB/HR F gr/lb	Leave	°F gr/lb	19	Gross Total	Glass ft ² (%	,		Capacity MBh	Coil Airflow cfm	Ent °F	
Main Clg	0.8	9.6	7.6	229	86.2 67		55.9 5		Floor	263	1555 (1567)	1	Main Htg	-4.5		57.3	75.
Aux Clg	0.0	0.0	0.0	(0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.
Opt Vent	0.0	0.0	0.0	Ċ				0.0 0.0	Int Door			- 11	Preheat	0.0	0	0.0	0.
(5) (1)			2.0					5.0	ExFlr	0	1000	. 11	usana ramana na				
Total	8.0	9.6							Roof	263	0 0		Humidif	0.0	0	0.0	0.
									Wall	562	0 0	3	Opt Vent	0.0	0	0.0	0.
									Ext Door	0	0 0) [Total	-4.5			

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By ACADEMIC

A35 MEETING ROOM 3

	OOLING C	OIL PEAK		CLG SPACE	PEAK			HEATING (OIL P	EAK		TEMPERATURES					
Peaked at Time: Mo/Hr. 9 Outside Air: OADB/WB/HR: 8			/Hr: 9 / 16 HR: 89 / 72 / 8	9	Mo/Hr: 9 / 17 OADB: 88				Mo/Hr: OADB:		eating Design 0		SADB Ra Plenum	Cooling 55.8 82.2		75.3 66.5	
		Space	Plenum	Net	Percent	Space	Percent			Space Peak	c	oil Peak	Percent	Return	82.2		66.5
	S	ens. + Lat.	Sens. + Lat _	Total	Of Total	Sensible	Of Total			Space Sens	355	ot Sens		Ret/OA	85.1		56.1
		Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h		Btu/h		Fn MtrTD	0.1		0.0
Envelope Load	5	Diam	Didit	Digiti	(10)	A Julian	(10)	Envelope Le	nade			Julia	(10)	Fn BldTD	0.3		0.0
Skylite Solar	•	0	0	0	0	0	0	Skylite Solar		0		/ (0.00	Fn Frict	0.9		0.0
Skylite Cond		0	0	0	0:	0	0	Skylite Co		0			0.00	THITTIES	0.0		0.0
Roof Cond		0	1.800	1,800	20	o o	0	Roof Con		0		-813					_
Glass Solar		0	0	0	0.	0	0	Glass Sol		0		-		A	IRFLOWS		
Glass/Door Co	nd	0	0	0	0:	0	0			0		(2.0			
Wall Cond		1.870	380	2,250	26:	1.990	46			-1.456		-1,777			Cooling		eating
Partition/Door		0	000	0	0:	0	0			0		.,		Diffuser	203		203
Floor		0		0	0:	0	0			0		ò		Terminal	203		203
Adjacent Floor		0	0	0	0:	0	0	Adjacent	Floor	0		(Main Fan	203		203
Infiltration		629	U	629	7		7			-651		-651		Sec Fan	0		0
Sub Total ==>		2.499	2,180	4,680	53:	2,272	53	*		-2,107		-3.241		Nom Vent	80		80
Sub Total>		2,499	2,100	4,000	33	2,212	55	: Oub rotal		2,107		5,24	50.52	15 TO 10 TO	80		
					1			Internal Loa	de					AHU Vent			80
Internal Loads								1	45					Infil	20		20
Lights		632 900	158	790	9	632	15	Lights		0	0			MinStop/Rh	0		0
	People		0	900	10 :	500	12	People		0		(Return	223		223
Misc	370 0 370 4; 379 9; Misc		Misc		0		(0.00	Exhaust	100		100					
Sub Total ==>		1,902	158	2,060	23:	1,511	35	Sub Total	==>	0		(0.00	Rm Exh	0		0
							1			-			08 08800800000	Auxiliary	0		0
Ceiling Load		563	-563	0	0	517	12	Ceiling Loa		-273		(Leakage Dwn	0		0
Ventilation Load	d	0	0	2,558	29:	0	0	Ventilation Load				-2,645	48.09	Leakage Ups	0		0
Adj Air Trans H	eat	0		0	0:	0	0	Adj Air Trans Heat		0		(0 0				
Dehumid. Ov Si	izina			0	0:			Ov/Undr Siz	ina	0		(0.00				_
Ov/Undr Sizing		0		0	0:	0	0	Exhaust He				385	-7.00	ENGI	NEERING C	KS	
Exhaust Heat			-794	-794	-9:	10.70		OA Preheat I				(0.00				
Sup. Fan Heat				301	3;			RA Preheat	Diff.		0		0.00	Cooling			
Ret. Fan Heat			0	0	0:			Additional F	Reheat			(% OA	39.4		39.4
Duct Heat Pkup	,		0	0	0:			System Plei	num Heat			(0.00	cfm/ft²	0.83		0.83
Underfir Sup Hi	Pkup			0	0:			Underfir Su	p Ht Pkup			(0.00	cfm/ton	276.80		5005000
Supply Air Leal	kage		0	0	0:			Supply Air I	eakage			(0.00	ft²/ton	335.27		
									/		F .			Btu/hr-ft²	35.79	-1	7.52
Grand Total ==:	>	4,965	981	8,805	100.00	4,300	100.00	Grand Total	==>	-2,380		-5,501	100.00	No. People	4		1:000
			COOLING	COIL SELI	CTION		7 À	7		AREAS	i i		HE	ATING COIL	SELECTIO	N	
	Tota	I 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		1000	ft ²	(%)		MBh	cfm	°F	°F
Main Clg	0.7	8.8	6.8	203	86.4 68	3.1 74.8	55.8 5		Floor	246		1000000	Main Htg	-4.3	203	56.1	75.3
Aux Clg	0.0	0.0	0.0	203		0.0 0.0		0.0 0.0	Part	0			Aux Htg	0.0	203	0.0	0.0
				23					10000000			- 1					
Opt Vent	0.0	0.0	0.0	(0.0 (0.0 0.0	0.0	0.0 0.0	Int Door ExFir	0			Preheat	0.0	0	0.0	0.0
Total	0.7	8.8							Roof	246	0	0	Humidif	0.0	0	0.0	0.0
1000000	978000	5.0							Wall	543	0	18	Opt Vent	0.0	0	0.0	0.0
									Ext Door		0	0	Total	-4.3	ő	75000	
									EXT DOOL	U	U	U	rotar	-4.3			

Project Name: Sunnylands

Dataset Name: AdminBuildingDecember3.trc

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