System Checksums By WSP USA INC. AHU-A-1-1 restaurant (Future) Series Fan-Powered VAV CLG SPACE PEAK HEATING COIL PEAK **COOLING COIL PEAK** TEMPERATURES Peaked at Time: Mo/Hr: 7 / 15 Mo/Hr: 7 / 18 Mo/Hr: Heating Design Cooling Heating 55.0 90.0 OADB/WB/HR: 93 / 70 / 94 OADB: 87 OADB: -7 Outside Air: SADB Ra Plenun 74.0 70.0 Space Peak Coil Peak Percent Return Plenum Space Percent Space Net Percent 74.5 70.0 Sens. + Lat. Sens. + Lat Tot Sens Of Total 📙 Ret/OA 81.4 41.6 Total Of Total Sensible Of Total Space Sens (%) Fn MtrTD Btu/h Btu/h Btu/h (%) Btu/h (%) Btu/h Btu/h 0.0 0.0 Fn BldTD 0.0 Envelope Loads Envelope Loads 0.0 0.00 Fn Frict 0.0 0.0 Skylite Solar Skylite Solar Skylite Cond Skylite Cond 0.00 Roof Cond Roof Cond 0.00 AIRFLOWS Glass Solar 7,315 11,331 7,152 4,283 0.00 7,315 Glass Solar -45,097 16.64 -8,340 3.08 0 0.00 **Diffuser** 9,133 3,272 Glass/Door Cond 9,133 Glass/Door Cond -45,097 Cooling Heating -8,340 Wall Cond 3,272 Wall Cond 4,949 4,949 Partition/Door Partition/Door 4,949 4,949 4,949 4,949 -148.12 0 0.00 0.00 -13,501 4.98 | **Terminal** Floor -374 Floor -13.501 0.00 0.00 Main Fan 0.00 Adiacent Floor 0.00 0.00 0.00 Adiacent Floor 0.00 4,949 4,949 Infiltration -2,655 0.98 Sec Fan 1,119 1,119 434 Infiltration -2,655 -69,593 -69,593 25.67 Nom Vent 0 23,053 26 Sub Total ==> 1,825 1,825 Sub Total ==> 20,464 20,464 12 AHU Vent 1,825 Internal Load Internal Load Infil 9,387 19,170 36,799 11 Lights 22 People 11,734 0.00 MinStop/Rh 1,912 4,949 9.387 2,347 Lights People 38,136 36,799 0.00 Return 4,986 4,986 38,136 23 0 Misc 36,799 41 Misc 0.00 Exhaust 1,861 1,861 0 0.00 || Rm Exh 2,347 86,669 52 65,356 73 Sub Total ==> Sub Total ==> 84,322 0 Auxiliary Ceiling Load 0 0.00 Leakage Dwn) Ceiling Load -133,002 49.07 📙 Leakage Ups 56,041 Ventilation Load 0 Ventilation Load 0 0 Adj Air Trans Heat 0 0 0 Adj Air Trans Heat 0 0 0 -24,100 -24,100 8.89 Dehumid. Ov Sizing Ov/Undr Sizing 599 0 0.00 Ov/Undr Sizing 3.645 3,645 -876 Exhaust Heat ENGINEERING CKS -876 0.00 Exhaust Heat OA Preheat Diff Cooling Heating 36.9 36.9 -44,360 16.37 Sup. Fan Heat RA Preheat Diff. 0 0.00 **0** % **0** A Ret. Fan Heat Additional Reheat 1.44 1.44 Duct Heat Pkup cfm/ft² Underflr Sup Ht Pkup Underflr Sup Ht Pkup 0 0.00 **cfm/ton** 312.12 Supply Air Leakage 0 Supply Air Leakage 0 0.00 **ft²/ton** 216.81 0 Btu/hr·ft² 55.35 -98.55 108,431 1,471 165,943 100.00 89,008 100.00 Grand Total ==> Grand Total ==> -93,693 -271,054 100.00 No. People 70 COOLING COIL SELECTION HEATING COIL SELECTION AREAS Leave DB/WB/HR Capacity Coil Airflow Ent Lvg Total Capacity Sens Cap. Coil Airflow Enter DB/WB/HR Gross Total Glass °F °F gr/lb MBh cfm °F ton MBh MBh cfm °F °F gr/lb ft² (%) 4,949 81.4 64.6 80.5 55.0 50.8 58.2 Floor 0 0.0 0.0 0.0 0.0 0.0 Part -205.0 4,949 55.0 90.0 0.0 0 0.0 0.0 15.9 190.3 0.0 0.0 123.6 0.0 3,438 Main Htg Main Clg Aux Clg 0 Aux Htg -133.9 -87.8 Opt Vent 0.0 0.0 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 Int Door Preheat 1,825 -7.0 55.0 ExFlr 3,438 Reheat 4,949 55.0 70.0 Total 0 0.0 0.0 0 0.0 0.0 15.9 190.3 Roof 0 0 0 Humidif 0.0 0.0 Wall 3,075 1,382 45 Opt Vent Ext Door 0 0 0 **Total** -338.8

Project Name: Dataset Name: SOMMET220519.TRC

> System Checksums By WSP USA INC.

	COOLING	COIL PEAK			CLG SPACE	PEAK			HEATING	G COIL PEAK		E TEMP	PERATURES	3	
Peake	ed at Time:	Mo	/Hr: 7 / 16		Mo/Hr:	7 / 18			Mo/Hi	r: Heating Design			Cooling	Heatir	ng
C	Outside Air:	OADB/WB/	HR: 92/69/9	91	OADB:	87			OADE	3: -7		SADB	55.0	90	
	6	Diaman	Net	Deveent	<u>Cases</u>	Deveent			Succe Dec		Deveent	Ra Plenum	74.0	70	
	Space Sens. + Lat.	Plenum Sens. + Lat	Net	Percent	Space	Percent			Space Pea		Percent	Return Ret/OA	74.7 76.7	70 61	
			Total	Of Total	Sensible	Of Total			Space Sen			Fn MtrTD	0.0		0.0
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/	h Btu/h	n (%)		0.0		0.0 0.0
nvelope Loads	0	0	0	0	0	0	Envelope L			0 0			0.0		
Skylite Solar	0	•	0	0	•	0	Skylite S			0 (0 (Fn Frict	0.0	0	0.0
Skylite Cond	•	0	•	0	0	0	Skylite C								_
Roof Cond	0	0	0	0	0	0	Roof Cor			•					
Glass Solar	50,771	0	50,771	18	63,427	31	Glass So			0 (AI	RFLOWS		
Glass/Door Cond	23,847	0	23,847	9	18,699	9	Glass/Do		-117,96				Cooling	Heat	ting
Wall Cond	15,171	0	15,171	5	15,691	8	Wall Con		-32,48			Diffuser	11,563	11,	563
Partition/Door	0		0	0	0	0	Partition/	Door		0 (11,563		
Floor	-981		-981	0	-419.89	0	Floor		-38,48	,		Terminal Main Fan	11,563	11,	
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent		0.0				-	11,	
Infiltration	4,582		4,582	2	1,752	1	Infiltration		-10,70	,		Sec Fan	11,563	11,	563
Sub Total ==>	93,390	0	93,390	33	99,150	48	Sub Tota	n/ ==>	-199,64	6 -199,646	6 43.18	Nom Vent	1,351	1,:	,35′
												AHU Vent	1,351	1,3	,35′
nternal Loads							Internal Loa	ads				Infil	147		147
Lights	29,215	7,304	36,519	13	29,215	14	Lights			0 0	0.00	MinStop/Rh	3,490	11,	
People	49,208	7,304 0	49,208	18	27,338	14	People			0 0		Return	11,710		,710
Misc	49,208 39,540	0	49,208 39,540	14	39,540	13	Misc			0 0		Exhaust	1,498		,498
	,		,		,								1,498	۱,۰	,490 C
Sub Total ==>	117,962	7,304	125,266	45	96,092	46	Sub Tota	a/ ==>		0 0	0.00	Rm Exh	0		0
Ceiling Load	0	0	0	0	0	0	Ceiling Loa	ıd		0 0		Leakage Dwn	0		C
/entilation Load	0	0	42,133	15	0	0	Ventilation	Load		0 -98,468	3 21.30	Leakage Ups	0		0
Adj Air Trans Heat	0		0	0	0	0	Adj Air Trar	ns Heat		0 () 0				
Dehumid. Ov Sizing	1		0	0			Ov/Undr Si	zina	-19,25	0 -19,250) 4.16				
Dv/Undr Sizing	20,512		20.512	7	12,708	6	Exhaust He	•		, (FNGIN	EERING CH	2	
Exhaust Heat	20,012	-934	-934	0	.2,. 00	Ū.	OA Preheat			(.0	
Sup. Fan Heat			0	0			RA Preheat			-144,990) 31.36		Cooling	Heatir	ng
Ret. Fan Heat		0	0	0			Additional			(% OA	11.7	11	1.7
Duct Heat Pkup		0	0	0								cfm/ft ²	1.08	1.0	80
Jnderflr Sup Ht Pk	an	-	0	0			Underflr Su	up Ht Pkup		(0.00	cfm/ton	434.51		
Supply Air Leakage	•	0	0	0			Supply Air	• •		(ft²/ton	402.07		
Supply An Lounage		0	Ŭ	U U			ouppij /m	Loundgo			0.00	Btu/hr·ft ²	29.85	-54.0	01
Grand Total ==>	231,865	6,370	280,367	100.00	207,951	100.00	Grand Tota	/ ==>	-218,89	6 -462,353	3 100.00	No. People	109	01.0	01
				ECTION					AREA	6					
	Total Canacity	Sens Cap.	COIL SEL		B/WB/HR	Loove	DB/WB/HR		AREA	Glass	"				Lv
	total Capacity	Sens Cap. MBh	coll Airflow cfm		°F gr/lb		°F gr/lb	G	1055 10(8)	ft ² (%)		MBh	coll Airtiow cfm	°F	Ľv
	5.6 <u>319.4</u>	237.7	11.563		.2 70.4	55.0 5	Ũ	Floor	10,700		Main Htg	-478.8	11,563 5		90.
	0.0 0.0	0.0	11,505		0.0 0.0		0.9 0.0	Part	0		Aux Htg	-478.8		0.0	90 0
	0.0 0.0	0.0	0		0.0 0.0		0.0 0.0	Int Door	1		Preheat	-99.1	1,351 ·		55
ph vent	0.0	0.0	0	0.0 (0.0	0.0	0.0 0.0	ExFlr	9,800		Preneat Reheat	-99.1 -205.2	11,563 5		55 70
Total Of	6.6 319.4								9,800 0	0 0		-205.2	,	0.0	70 0
Total 20	5.0 319.4							Roof	-		Humidif		-		-
								Wall	10,168	3,575 35	Opt Vent	0.0	0	0.0	0
								Ext Door	87	0 0	Total	-577.9			

RESIDENTIAL FAN COIL UNITS HVAC LOADS

Project Name:

Dataset Name: SOMMET220519.TRC

Dataset Name: SOMMET220519.TRC

B602 unit A FCU	bedroom 1						VSP USA II								
	COOLING C	OIL PEAK			CLG SPACE	E PEAK			HEATING C	OIL PEAK		ТЕМ	PERATURE	S	
	d at Time: utside Air:		lo/Hr: 7 / 16 3/HR: 92 / 69 / 9	91	Mo/Hr: OADB:	7 / 19			Mo/Hr: I OADB: ·	Heating Design -7		SADB	Cooling 59.7 74.0	Неа	ating 84.0 70.0
	Space Sens. + Lat.	Plenum Sens. + Lat	Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peak Space Sens	Tot Sens	Percent Of Total	Ra Plenum Return Ret/OA	74.7 77.0		70.0 68.0
Envelope Loads Skylite Solar	Btu/h 0 0	Btu/h 0 0	Btu/h 0 0	(%) 0 0	Btu/h 0 0	(%) 0 0	Envelope Lo Skylite So Skylite Co	olar	Btu/h 0 0	Btu/h C	0.00	Fn MtrTD Fn BldTD Fn Frict	0.0 0.0 0.0		0.0 0.0 0.0
Skylite Cond Roof Cond Glass Solar Glass/Door Cond	0 0 400 544	0 0 0	0 400 544	0 8 11	0 0 1,151 332	0 0 31 9	Roof Con Glass Sol Glass/Doo	d ar	0 0 -2,610	0 0 2,610	0.00	A	IRFLOWS		
Wall Cond Partition/Door Floor	439 0 0	0	439 0 0	9 0 0	580 0 0.00	9 15 0 0		ł	-2,810 -729 0 0	-2,610 -729 0	11.45 0.00	Diffuser Terminal	Cooling 279 279		eating 279 279
Adjacent Floor Infiltration Sub Total ==>	0.00 130	0.00	0.00 130	0.00 3 32	0.00 38	0.00 1 56	Adjacent Infiltration Sub Total		0.00 -345 -3,684	0.00 -345 -3,684	0.00 5.42	Main Fan Sec Fan	279 0		27
Internal Loads	1,513		1,513		2,101		Internal Loa					Nom Vent AHU Vent Infil	37 37 5		3.
Lights People Misc	718 900 449	180 0 0	898 900 449	19 19 9	718 500 449	19 13 12	Lights People Misc		0 0 0		0.00	MinStop/Rh Return Exhaust	0 284 42		28 4
Sub Total ==> Ceiling Load	2,067 0	180 0	2,246 0	47 0	1,667 0	44 0		d	0	0	0.00	Rm Exh Auxiliary Leakage Dwn	0 0 0		
Ventilation Load Adj Air Trans Heat Dehumid. Ov Sizing	0 0	0	1,004 0 0	21 0 0	0 0	0 0	Ventilation L Adj Air Tran Ov/Undr Siz	s Heat	0 0 0	-523 () ()	0	Leakage Ups	0		
Ov/Undr Sizing Exhaust Heat Sup. Fan Heat	0	-26	0 -26 0	0 -1 0	0	0	Exhaust Hea OA Preheat RA Preheat	Diff.		0 -2,161 0	33.93 0.00		EERING C	Hea	ating
Ret. Fan Heat Duct Heat Pkup Underfir Sup Ht Pku Supply Air Leakage	p	0 0 0	0 0 0 0	0 0 0 0			Additional F System Pler Underflr Su Supply Air L	num Heat p Ht Pkup		0 0 0 0	0.00	% OA cfm/ft² cfm/ton ft²/ton	13.2 0.53 609.83 1,150.03		13.2 0.53
Grand Total ==>	3,580	153	4,736	100.00	3,768	100.00	Grand Total	==>	-3,684	-6,368	100.00	Btu/hr∙ft² No. People	10.43 2	-1	6.60
	otal Capacity	COOLIN Sens Cap. MBh	G COIL SEL Coil Airflow cfm	Enter D)B/WB/HR °F gr/lb	Leave °F	e DB/WB/HR °F gr/lb		AREAS Gross Total	Glass ft² (%)	HI	EATING COIL Capacity MBh	SELECTIO Coil Airflow cfm	N Ent °F	
Aux Clg 0	.5 5.5 .0 0.0	3.9 0.0	279 0	0.0 0	2.4 76.2 0.0 0.0	59.7 5 0.0	5.5 70.8 0.0 0.0	Floor Part	526 0		Main Htg Aux Htg	-6.6 0.0	0	64.0 0.0	84 0
•	.0 0.0 .5 5.5	0.0	37	93.2 70).2 93.8	92.0 6	9.9 93.8	Int Door ExFlr Roof Wall	1 0 0 228		Preheat Humidif Opt Vent	0.0 0.0 -2.2	0	0.0 0.0 -7.0	0 0 55
								Ext Door	0	0 0	Total	-8.7			

Zone Checksums

TOWER HVAC LOADS

System Checksums By WSP USA INC.

	COOLING	OIL PEAK			CLG SPACE	PEAK			HEATING	COIL	PEAK		TEMF	PERATURE	S	
	ked at Time: Outside Air:		/Hr: 7 / 15 HR: 93 / 70 / 9	94	Mo/Hr: OADB:				Mo/Hr OADB		ng Design		SADB	Cooling 57.8 74.0		i ng 4.0
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peal Space Sens		Coil Peak Tot Sens		Ra Plenum Return Ret/OA	74.0 74.6 77.1	7	0.0 0.0 6.0
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/ł		Btu/h	(%)	Fn MtrTD	0.0		0.0
nvelope Loads	Dtu/II	Dtu/II	Blu/II	(70)	Blu/II	(70)	Envelope L	ahen	Dtu/i	1	Dlu/II	(70)	Fn BldTD	0.0		0.0
Skylite Solar	0	0	0	0	0	0	Skylite So		(ר	0	0.00	Fn Frict	0.0		0.0
Skylite Cond	0	0	0	0	0	0	Skylite Co)	0	0.00				
Roof Cond	27,847	0	27,847	2	28,874	3	Roof Con		-39,143	3	-39,143	2.86				
Glass Solar	193,638	0	193,638	15	302,448	32	Glass So		,)	0	0.00	AI	RFLOWS		
Glass/Door Cond	120,100	0	120,100	9	79,982	9	Glass/Do	or Cond	-586,918	3	-586,918	42.91		C astling		
Wall Cond	65,321	0	65,321	5	72,508	8	Wall Con	d	-152,289		-152,289	11.13		Cooling		ating
Partition/Door	3,413		3,413	0	4,221	0	Partition/I	Door	-65,347	7	-65,347	4.78	Diffuser	60,807		3,930
Floor	-1,891		-1,891	0	-1,693.77	0	Floor		-99,416	5	-99,416	7.27	Terminal	60,807		3,93
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent	Floor	0.00)	0.00	0.00	Main Fan	60,807	43	3,930
Infiltration	22,001		22,001	2	9,418	1	Infiltration	ı	-52,892	2	-52,892	3.87	Sec Fan	0		(
Sub Total ==>	430,428	0	430,428	34	495,758	53	Sub Total	==>	-996,005	5	-996,005	72.82	Nom Vent	7,989	7	7.989
													AHU Vent	7,989	7	7.989
ternal Loads							Internal Loa	lds					Infil	726		726
Lights	140,762	35,190	175,952	14	140,762	15	Lights		()	0	0.00	MinStop/Rh	0		12
People	279,773	35, 190 0	279,773	22	140,762	15	People)	0	0.00	Return	61,533	44	1,662
Misc	151,724	0	151,724	12	151,724	16	Misc			2	0	0.00	Exhaust	8,714		3,714
													Rm Exh	0,714	0	,, ,
Sub Total ==>	572,258	35,190	607,449	48	436,051	47	Sub Tota	==>	()	0	0.00		0		(
ailing Lood	0	0	0	<u> </u>	0	0	Ceiling Loa	4	(h	0	0.00	Auxiliary	0		(
eiling Load entilation Load	0	0 0	0	0	0	•	Ventilation)	-582.231	42.57	Leakage Dwn	-		
	0	0	236,446	19	0	0)	,		Leakage Ups	0		(
dj Air Trans Heat	•		0	0	0	0	Adj Air Tran			-	0	0				
ehumid. Ov Sizir	•		0	0			Ov/Undr Siz	•	()	0	0.00				
v/Undr Sizing	0		0	0	0	0	Exhaust He				0	0.00	ENGIN	EERING C	۲S	
xhaust Heat		-4,984	-4,984	0			OA Preheat				0	0.00		Cooling	Heat	ina
up. Fan Heat		0	0	0			RA Preheat				210,380	-15.38	% OA	13.1		8.2
et. Fan Heat		0	0	•			Additional F	Reheat			0	0.00	cfm/ft ²	0.81		0.2
ouct Heat Pkup		0	0	0							0	0.00			0	.59
Inderfir Sup Ht Pl	•	0	0				Underflr Su	• •			0	0.00	cfm/ton	499.87		
upply Air Leakag	е	0	0	0			Supply Air I	Leakage			0	0.00	ft²/ton	613.89		~~~
Grand Total ==>	1,002,686	30,207	1,269,339	100.00	931,808	100.00	Grand Tota	==>	-996,005	5	-1,367,857	100.00	Btu/hr·ft² No. People	19.55 515	-33	.02
		COOLING	COIL SELI	ECTION					AREA	S		н		SELECTIO	N	
	Total Capacity ton MBh	Sens Cap. MBh	Coil Airflow cfm		B/WB/HR `F gr/lb		°F gr/lb		Gross Total	Gla ft²			Capacity MBh	Coil Airflow cfm	Ent °F	L۷
ain Clg 12 ux Clg	21.7 1,459.7 0.0 0.0	1,033.0 0.0	60,807 0	77.1 62 0.0 0	.4 76.1 .0 0.0	57.8 53 0.0 (3.9 66.5 0.0 0.0	Floor Part	74,677 23,376			Main Htg Aux Htg	-2,466.0 0.0	43,936 0	46.5 0.0	94 C
pt Vent	0.0 0.0 0.0	0.0	0		.0 0.0		0.0 0.0 0.0 0.0	Int Door	1			Preheat	0.0	0	0.0	0
otal 12	21.7 1,459.7							ExFlr Roof	18,449 15,886	0		Humidif	0.0	0	0.0	(
								Wall	48,867	17,965	37	Opt Vent	0.0	0	0.0	(
								Ext Door	58	0	0	Total	-2.466.0			

Proiect Name: Dataset Name: SOMMET220519.TRC

AMENITY SYSTEM HVAC LOADS

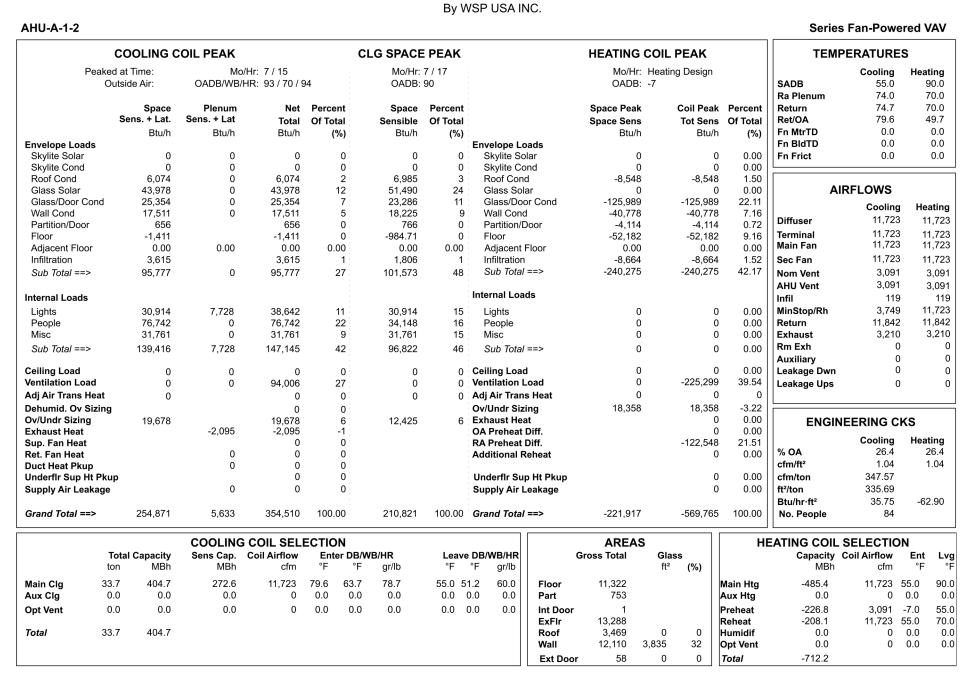
TRACE® 700 v6.3.5 calculated at 09:46 AM on 05/19/2022 Alternative - 2 System Checksums Report Page 1 of 7

TRACE® 700 v6.3.5 calculated at 09:36 AM on 05/19/2022

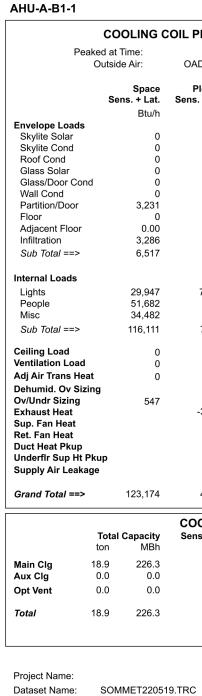
TRACE® 700 v6.3.5 calculated at 09:36 AM on 05/19/2022

Alternative - 1 System Checksums Report Page 6 of 19

Alternative - 1 System Checksums Report Page 2 of 19



System Checksums



Bldg B

Envelope Loads

Skylite Cond Roof Cond Glass Solar Glass/Door Cond Wall Cond Partition/Door

Adjacent Floor

Sub Total ==>

Internal Loads

Sub Total ==>

Ceiling Load Ventilation Load

Adi Air Trans Heat

Dehumid, Ov Sizing

Ov/Undr Sizing

Exhaust Heat

Sup. Fan Heat

Ret. Fan Heat

Duct Heat Pkup

Main Clg

Opt Vent

Total

Proiect Name:

Aux Clg

Underflr Sup Ht Pkup

Supply Air Leakage

Grand Total ==>

0.0

Dataset Name: SOMMET220519.TRC

Lights People

Misc

Infiltration

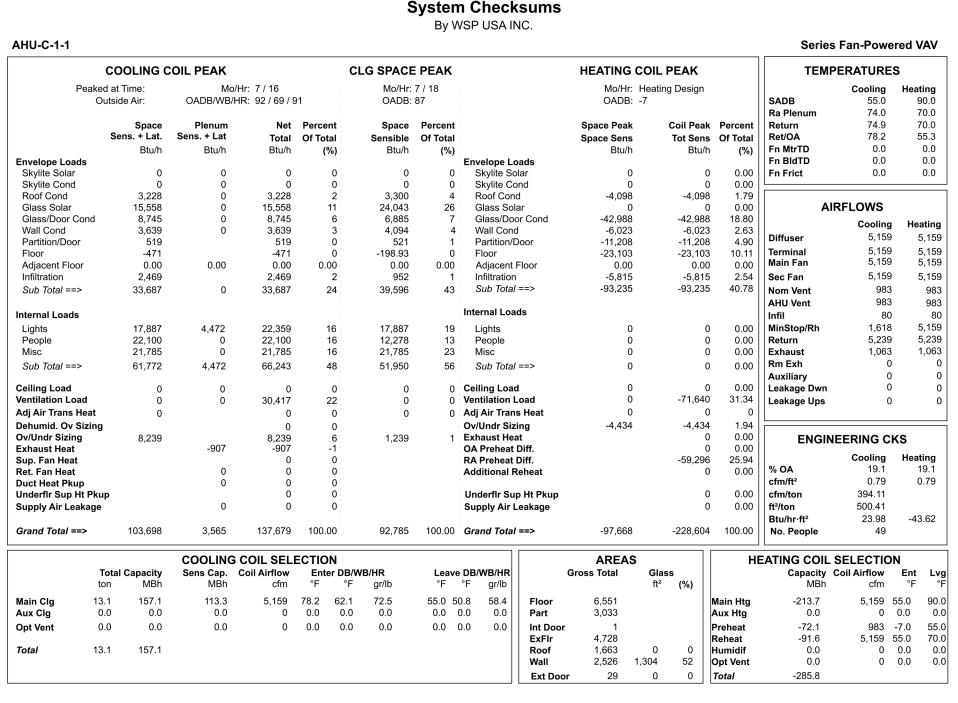
Floor

Skylite Solar

Project Name: Dataset Name: SOMMET220519.TRC

TRACE® 700 v6.3.5 calculated at 09:36 AM on 05/19/2022

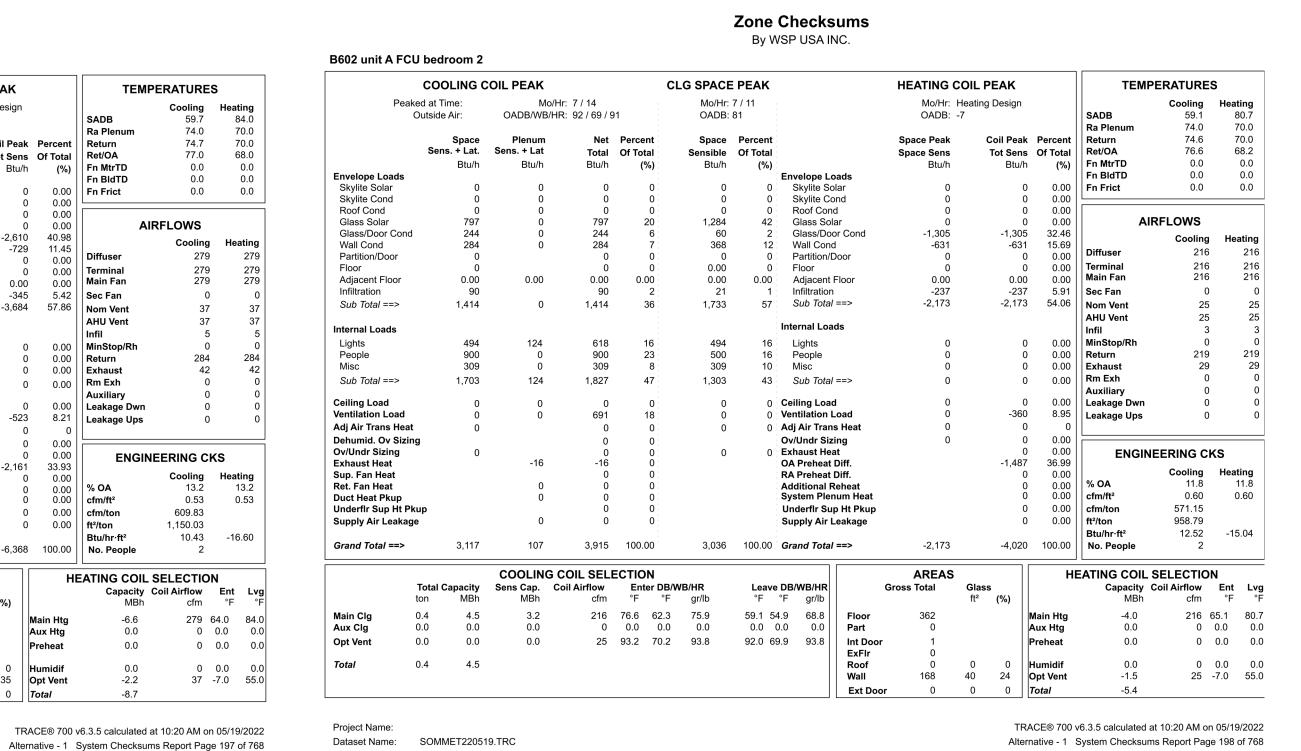
Alternative - 1 System Checksums Report Page 1 of 19



Project Name: Dataset Name: SOMMET220519.TRC

Alternative - 1 System Checksums Report Page 5 of 19

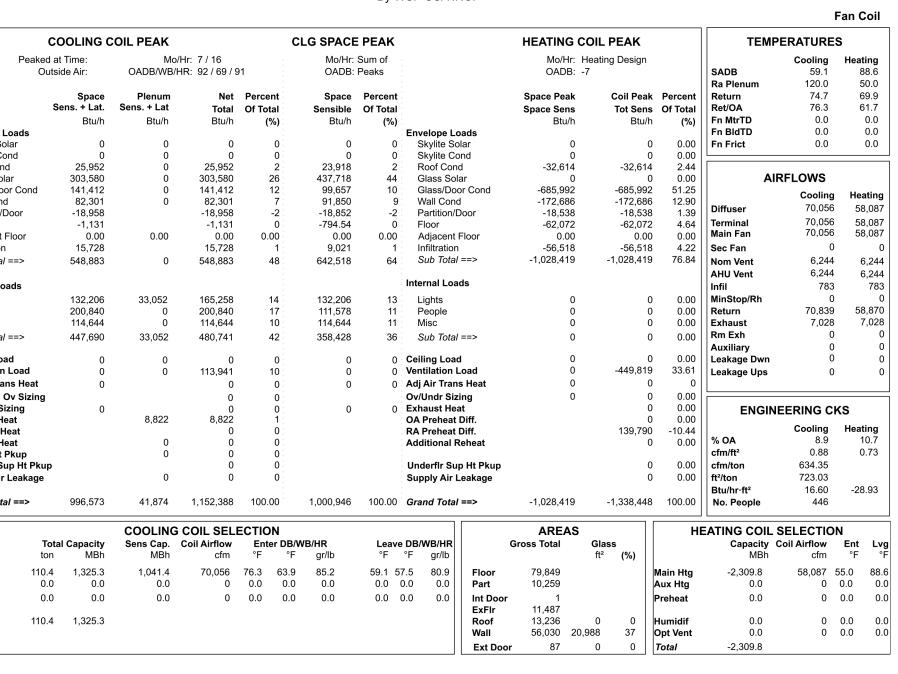
TRACE® 700 v6.3.5 calculated at 10:20 AM on 05/19/2022



B602 unit A FCU bedroom 3 Peaked at Time: Outside Air: Envelope Loads Skvlite Solar Skylite Cond Roof Cond Glass Solar Glass/Door Cond Wall Cond Partition/Door Floor Adiacent Floor Infiltration Sub Total ==> Internal Loads Lights People Misc Sub Total ==> Ceiling Load Ventilation Load Adj Air Trans Heat Dehumid. Ov Sizing Ov/Undr Sizing Exhaust Heat Sup. Fan Heat Ret. Fan Heat Duct Heat Pkup Underflr Sup Ht Pkup Supply Air Leakage Grand Total ==> ton MBh 0.7 8.5 Main Clg Aux Clg 0.0 Opt Vent 0.0 0.0 Total 0.7

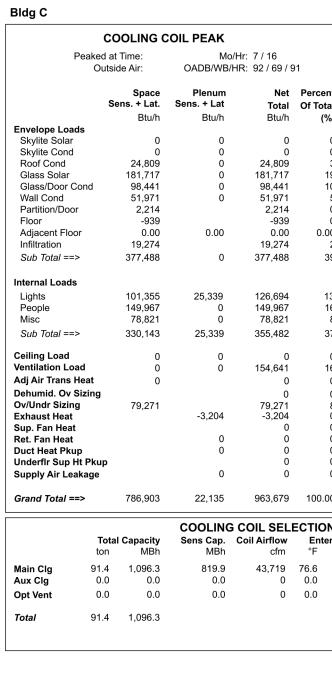
Project Name:





TRACE® 700 v6.3.5 calculated at 09:46 AM on 05/19/2022

Alternative - 2 System Checksums Report Page 2 of 7



Project Name:

Project Name:

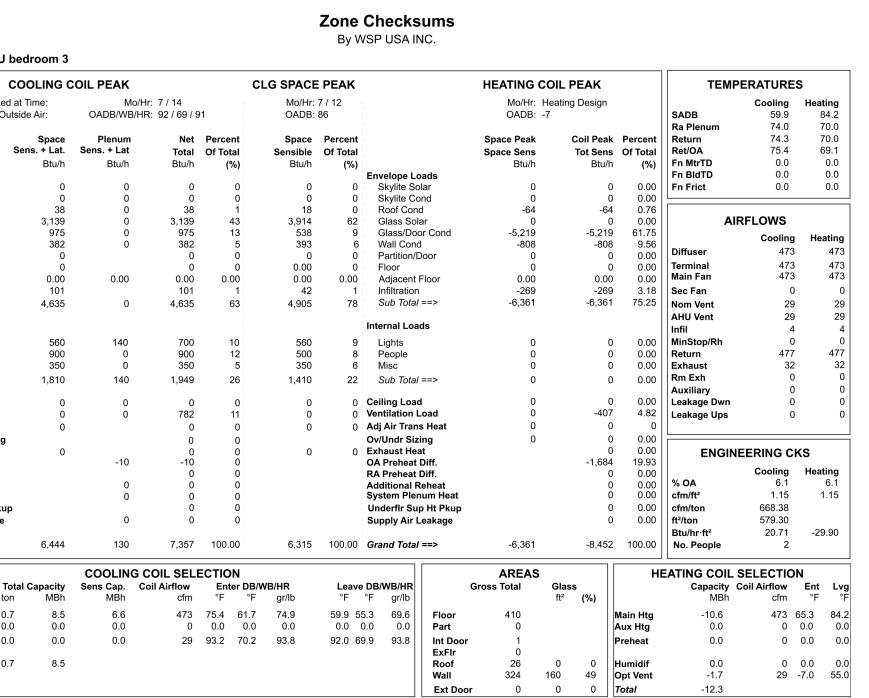
Dataset Name: SOMMET220519.TRC

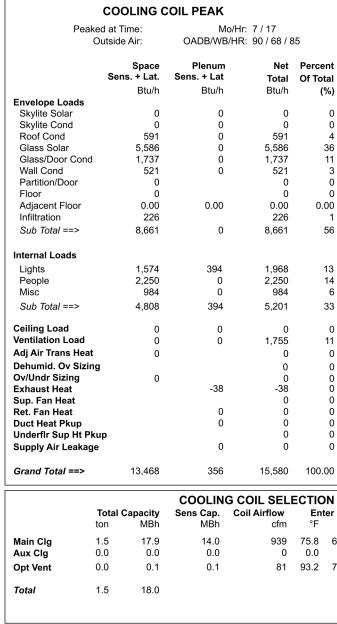
Dataset Name: SOMMET220519.TRC

By WSP USA INC. Series Fan-Powered VAV COOLING COIL PEAK CLG SPACE PEAK HEATING COIL PEAK TEMPERATURES CoolingHeating55.090.0 Mo/Hr: 7 / 15 Mo/Hr: 7 / 16 Mo/Hr: Heating Design OADB/WB/HR: 93 / 70 / 94 OADB: 92 OADB: -7 74.0 70.0 Ra Plenum Plenum Sens. + Lat Space Percent Space Peak Coil Peak Percent Return Net Percent Space 75.4 70.0 Tot Sens Of Total Ret/OA Total Of Total Sensible Of Total Space Sens 35.4 (%) Fn MtrTD Btu/h 0.0 0.0 Btu/h Btu/h (%) Btu/h (%) Btu/h Btu/h Fn BldTD 0.0 Envelope Loads 0.00 Fn Frict 0.0 0.0 Skylite Solar Skylite Cond 0.00 Roof Cond 0.00 AIRFLOWS Glass Solar 0.00 Glass/Door Cond 0.00 Cooling Heating 0 0.00 Wall Cond 5,430 5,430 Diffuser -45,972 14.23 Diffuser -17,956 5.56 Terminal 0.00 0.00 Main Fan 3,231 3,872 0.00 -45,972 -17,956 3.231 Partition/Door 5,430 5,430 5,430 5,430 Floor 0.00 0.00 Adjacent Floor 0.00 0.00 0.00 0.00 0.00 5,430 5,430 3,286 3,286 1,989 -8,393 -8,393 2.60 Sec Fan Infiltration -72,322 -72,322 22.38 Nom Vent 2,440 2,440 6,517 0 5,861 6 Sub Total ==> 6,517 2,440 2,440 AHU Vent Internal Loads Infil 115 29,947 27,351 34,482 31 Lights28 People 2,138 5,430 29,947 7,487 37,434 0 0.00 MinStop/Rh 51,682 34,482 51,682 0.00 Return 5,545 5,545 26 34,482 35 Misc 0.00 Exhaust 2,556 2,556 0 0.00 || Rm Exh 91,780 94 Sub Total ==> 116,111 7,487 123,598 63 Auxiliary) Ceiling Load 0 0.00 Leakage Dwn 0 -177,867 55.05 || Leakage Ups 69,625 0 Ventilation Load 0 0 0 Adj Air Trans Heat 0 0 0 0 -30,467 -30,467 9.43 Ov/Undr Sizing 0 0.00 547 ENGINEERING CKS 547 0 Exhaust Heat -3,451 -3,451 0.00 OA Preheat Diff. Cooling Heating 44.9 44.9 13.14 RA Preheat Diff. -42,442 0 0.00 || % **OA** 0 Additional Reheat 0.50 0.50 cfm/ft² 0 0.00 | | cfm/ton Underflr Sup Ht Pkup 287.96 0 0 0 Supply Air Leakage 0 0.00 **ft²/ton** 581.65 Btu/hr·ft² 20.63 -36.82 -323,099 100.00 No. People Grand Total ==> 123,174 4,036 196,835 100.00 97,641 100.00 Grand Total ==> -102,789 109 HEATING COIL SELECTION COOLING COIL SELECTION AREAS Leave DB/WB/HR Gross Total Glass Capacity Coil Airflow Ent Lvg Total Capacity Sens Cap. Coil Airflow Enter DB/WB/HR MBh cfm °F °F gr/lb °F °F gr/lb ft² (%) MBh cfm °F 5,430 83.4 65.9 84.2 55.0 51.2 59.8 Floor 0 0.0 0.0 0.0 0.0 0.0 Part 146.0 0.0 -224.9 5,430 55.0 90.0 10,968 Main Htg 17,352 0.0 0 0.0 0.0 Aux Htg 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 Int Door Preheat -179.0 2,440 -7.0 55.0 Reheat -96.4 5,430 55.0 70.0 ExFlr 0 0.0 0.0 0 0.0 0.0 Roof 0.0 0 0 0 Humidif 0.0 Wall 0 0 0 0 Opt Vent Ext Door 0 0 **Total** -403.9 TRACE® 700 v6.3.5 calculated at 09:36 AM on 05/19/2022 Alternative - 1 System Checksums Report Page 3 of 19

System Checksums

	COOLING C	OIL PEAK			CLG SPACE	PEAK			HEATING C	OIL PEAK		TEM	PERATURE	S
Pea	ked at Time: Outside Air:		o/Hr: 7 / 15 /HR: 93 / 70 / 9)4	Mo/Hr: OADB:				Mo/Hr: H OADB: -	Heating Design 7		SADB	Cooling 55.0	Heatin 90. 70.
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total			Space Peak Space Sens		Percent Of Total	Ra Plenum Return Ret/OA	74.0 80.9 88.6	70. 68. 20.
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)			Btu/h	Btu/h	(%)	Fn MtrTD	0.0	0.
Invelope Loads							Envelope Lo					Fn BldTD	0.0	0
Skylite Solar	0	0	0	0	0	0	Skylite So		0	0		Fn Frict	0.0	0
Skylite Cond	0	0	0	0	0	0	Skylite Co		0	0				
Roof Cond	0	0	0	0	0	0	Roof Cond		0	0			IRFLOWS	
Glass Solar	0	0	0	0	0	0	Glass Sol		0	0		A	IKFLUW5	
Glass/Door Cond	I 0 0	0	0	0	0	0	Glass/Doc Wall Conc		0	0			Cooling	Heat
Wall Cond Partition/Door	-5,852	0	-5,852	-13	-5,580	-23	Partition/E		-11,641	-11,641	0.00	Diffuser	1,091	1,0
Floor	-5,652		-5,652	-13	-5,580	-23	Floor	001	-5,665	-5,665		Terminal	1,091	1,0
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent I	Floor	-5,665	-5,665 0.00		Main Fan	1,091	
Infiltration	564	0.00	564	0.00	36	0.00	Infiltration	1001	-2,084	-2,084		Sec Fan	1,091	
Sub Total ==>	-5,288	0	-5,288	-11	-5,544	-23	Sub Total	==>	-19,390	-19,390		Nom Vent	685	.,
Sub 10tal>	-3,200	0	-3,200	-11	-5,544	-23	Oub rotar		10,000	10,000	20.04	AHU Vent	685	
tornal Loado							Internal Loa	ds						
iternal Loads	0.400	0.007	44.000		0.400							Infil Mix Otan (Di	31	
_ights	9,466	2,367	11,833	26	9,466	39	Lights		0	0		MinStop/Rh	460	
People	3,600	0	3,600	8	2,000	8	People		0	0		Return	1,122	
Misc	11,833	0	11,833	26	11,833	49	Misc		0	0		Exhaust	716 0	
Sub Total ==>	24,899	2,367	27,266	59	23,299	96	Sub Total	==>	0	0	0.00	Rm Exh	0	
							0.11		0	0	0.00	Auxiliary	0	
eiling Load	0	0	0	0	0	0			0	-48,668		Leakage Dwn	-	
entilation Load	0	0	19,118	41	0	0	Ventilation L		0			Leakage Ups	0	
dj Air Trans Hea	-		0	0	0	0	Adj Air Trans		•	0	-			
ehumid. Ov Sizii	•		0	0			Ov/Undr Siz	5	-3,242	-3,242				
0v/Undr Sizing	6,566	1 000	6,566	14	6,421	27				0		ENGIN	NEERING CI	KS
xhaust Heat		-1,399	-1,399 0	-3 0			OA Preheat			0			Cooling	Heatir
up. Fan Heat		0	0	0			RA Preheat			-5,211 0	6.81 0.00	% OA	62.8	62
let. Fan Heat Juct Heat Pkup		0	0	0			Additional R	eneat		0	0.00	cfm/ft ²	0.31	0.3
nderfir Sup Ht P	kun	0	0	0			Underfir Su	Ht Dkup		0	0.00	cfm/ton	250.68	0.0
upply Air Leakag	•	0	0	0			Supply Air L	•		0		ft²/ton	796.76	
uppiy Ali Leaka	Je	0	0	U				eakaye		0	0.00	Btu/hr·ft ²	15.06	-27.5
rand Total ==>	26,176	967	46,262	100.00	24,177	100.00	Grand Total	==>	-22,632	-76,511	100.00	No. People	8	-27.0
		COOLING	COIL SELI	ECTION					AREAS		HI		SELECTIO	N
	Total Capacity ton MBh	Sens Cap. MBh	Coil Airflow cfm		°F gr/lb		• DB/WB/HR °F gr/lb	0	Gross Total	Glass ft² (%)		Capacity MBh	Coil Airflow cfm	Ent °F
ain Clg	4.4 52.2	34.7	1,091	88.6 67	7.5 85.1	55.0 5	0.9 58.6	Floor	3,467		Main Htg	-45.2	1,091	55.0
ix Clg	0.0 0.0	0.0	1,001		0.0 0.0		0.0 0.0	Part	5.519		Aux Htg	0.0	1,001	0.0
ot Vent	0.0 0.0	0.0	0		0.0 0.0		0.0 0.0	Int Door	1		Preheat	-50.2		-7.0
	0.0 0.0	0.0	0	0.0 (0.0	0.0	0.0 0.0	ExFir	171		Reheat	-50.2		-7.0 55.0
tal	4.4 52.2							Roof	0		Humidif	0.0	1,091	0.0
	02.2							Wall	0		Opt Vent	0.0	0	0.0
									0	0 0	-	-95.4	0	0.0
								Ext Door	0	0 0	Total	-95.4		





B602 unit A FCU living room

Dataset Name: SOMMET220519.TRC

TRACE® 700 v6.3.5 calculated at 10:20 AM on 05/19/2022 Alternative - 1 System Checksums Report Page 199 of 768

Project Name: Dataset Name: SOMMET220519.TRC

System Checksums By WSP USA INC.

											Fan Coil
CI	LG SPACE	PEAK			HEATING		PEAK		ТЕМІ	PERATURE	s
	Mo/Hr:	Sum of			Mo/H	r: Heatir	ng Design			Cooling	Heating
	OADB:				OADE		.g 2 co.g.		SADB	55.0	90.0
	0,1221	- ouno			07121				Ra Plenum	74.0	70.0
ent	Space	Percent			Space Pea	ŀ	Coil Peak	Percent	Return	74.6	70.0
	Sensible	Of Total			Space Fea			Of Total	Ret/OA	76.6	60.2
tal	Btu/h				Btu/		Btu/h		Fn MtrTD	0.0	0.0
(%)	Dlu/II	(%)	Envelope L		Dlu/	n	Dlu/I	(%)	Fn BldTD	0.0	0.0
0	0	0	Skylite S			0	C	0.00	Fn Frict	0.0	0.0
0	0	0	Skylite C			0	0		FILFICE	0.0	0.0
3	22,124	3	Roof Cor		-31,24	-	-31,244				
19	281,059	36	Glass So		,	0	-31,244		<u> </u>	RFLOWS	
10	69,397	9	Glass 50 Glass/Do		-477,00	•	-477,009		^'		
5	61,322	8	Wall Con		-477,00		-113,693			Cooling	Heating
0	2,192	0	Partition/		-28,84		-28,840		Diffuser	43,719	39,207
0	2,192	0	Floor		-20,04		-46,928		Terminal	43,719	39,207
.00	0.00	0.00	Adjacent	Floor	-40,92		-40,920		Main Fan	43,719	39,207
2	7,349	0.00	Infiltration		-45,07		-45,079		Sec Fan	0	(
2 39	443,464	56	Sub Tota		-45,07 -742,79		-742,792			4,987	
39	443,464	90	Sub 101a	/ ==>	-142,15	2	-142,192	71.51	Nom Vent	,	4,987
			Internal Loa	de					AHU Vent	4,987	4,987
				aus					Infil	619	619
13	101,355	13	Lights			0	C	0.00	MinStop/Rh	0	(
16	83,315	11	People			0	C	0.00	Return	44,337	39,826
8	78,821	10	Misc			0	C	0.00	Exhaust	5,605	5,605
37	263,491	34	Sub Tota	/ ==>		0	C	0.00	Rm Exh	0	(
	200,101		045 1014			•		0.00	Auxiliary	0	C
0	0	0	Ceiling Loa	d		0	C	0.00	Leakage Dwn	0	(
16	0	0	Ventilation	Load		0	-363,440	34.89	Leakage Ups	0	(
0	0	0	Adj Air Trar	ns Heat		0	C	0		-	
0	•	•	Ov/Undr Siz		58	8	588	-0.06			
8	79,271	10		•	00	0	000			IEERING C	
0	13,211	10	OA Preheat				Č				13
0			RA Preheat				64,052			Cooling	Heating
0			Additional I				01,002		% OA	11.4	12.7
0			Additional	tonout				0.00	cfm/ft ²	0.67	0.60
0			Underfir Su	in Ht Pkun			C	0.00	cfm/ton	478.52	
0			Supply Air				C		ft²/ton	709.68	
Ũ			cuppiy / li	Lounago				0.00	Btu/hr·ft ²	16.91	-26.64
.00	786,226	100.00	Grand Tota	/ ==>	-742,20	4	-1,041,592	100.00	No. People	333	20.01
DN]		AREA	e					N
ter DB/W		Loove	DB/WB/HR		Gross Total	Gla				Coil Airflow	
°F	gr/lb	°F	°F gr/lb		Gross rotal	ft ²	(%)		MBh	con Airnow cfm	Ent Lv °F °
	0		U U			11	(70)				
61.2	70.5	55.0 5		Floor	64,838			Main Htg	-1,727.6	,	52.8 90.
0.0	0.0	0.0	0.0 0.0	Part	7,236			Aux Htg	0.0	0	0.0 0.
0.0	0.0	0.0	0.0 0.0	Int Door	· 1			Preheat	0.0	0	0.0 0.
				ExFlr	9,517						
				Roof	12,680	0	0	Humidif	0.0	0	0.0 0.
				Wall	37,680	14,609	39	Opt Vent	0.0	0	0.0 0.
				Ext Doo	r 29	0	0	Total	-1.727.6		
					0	0	-		.,		

TRACE® 700 v6.3.5 calculated at 09:46 AM on 05/19/2022 Alternative - 2 System Checksums Report Page 3 of 7

System Checksums By WSP USA INC.

TRACE® 700 v6.3.5 calculated at 09:36 AM on 05/19/2022 Alternative - 1 System Checksums Report Page 4 of 19

Zone Checksums By WSP USA INC.

ſ	LG SPACE				HEATING				TEM	PERATURE	:5	
U												
	Mo/Hr:					Heating	Design			Cooling	Heat	•
	OADB:	87			OADB:	-7			SADB	59.6		32.5
	-								Ra Plenum	74.0		0.0
nt	Space	Percent			Space Peak			Percent	Return	74.4		0.0
al	Sensible	Of Total			Space Sens			Of Total	Ret/OA	75.8		68.7
6)	Btu/h	(%)			Btu/h		Btu/h	(%)	Fn MtrTD	0.0		0.0
			Envelope Lo						Fn BldTD	0.0		0.0
0	0	0	Skylite Sc		0		0	0.00	Fn Frict	0.0		0.0
0	0	0	Skylite Co		0		0	0.00				
4	584	5	Roof Con		-702		-702	4.13				
36	6,246	49	Glass Sol		0		0	0.00		RFLOWS		
11	1,478	12 4	Glass/Do Wall Cond		-8,938 -743		-8,938 -743	52.51		Cooling	g Hea	ating
3 0	559 0	4	Partition/		-743		-743	4.37 0.00	Diffuser	93)	939
0	0.00	0	Floor	1000	0		0	0.00	Terminal	93	2	939
00	0.00	0.00	Adjacent	Floor	0.00		0.00	0.00	Main Fan	93		939
1	145	0.00	Infiltration		-756		-756	4.44	Sec Fan)	0
		70	Sub Total		-11,140		-11,140	65.44		8		
56	9,013	70	Sub Total		-11,140		-11,140	00.44	Nom Vent	-		81
			Internal Loa	de					AHU Vent	8		81
				143					Infil	1		10
3	1,574	12	Lights		0		0	0.00	MinStop/Rh)	0
14	1,250	10	People		0		0	0.00	Return	94		949
6	984	8	Misc		0		0		Exhaust	9		91 0
33	3,808	30	Sub Total	==>	0		0	0.00	Rm Exh)	
			o		0		0	0.00	Auxiliary)	0
0	0	0	Ceiling Loa		0		0	0.00	Leakage Dwn)	0
11	0	0	Ventilation I		0		-1,146	6.73	Leakage Ups)	0
0	0	0	Adj Air Tran		0		0	0				
0			Ov/Undr Siz	•	0		0	0.00				
0	0	0	Exhaust He				0	0.00	ENGIN	EERING C	KS	
0			OA Preheat				-4,736 0	27.82 0.00		Cooling	Heat	ina
0			RA Preheat Additional F				0	0.00	% OA	8.6		8.6
0			System Plei				0	0.00	cfm/ft ²	0.81).81
0			Underfir Su				0	0.00	cfm/ton	625.63		
0			Supply Air I	• •			0	0.00	ft²/ton	768.33		
U j				Leanaye			0	0.00	Btu/hr·ft ²	15.62	-20).76
00	12,820	100.00	Grand Total	==>	-11,140		-17,022	100.00	No. People	5	-20	
	12,020	100.00			-11,140		-17,022	100.00	No. People	5		
N					AREAS	;		HE	EATING COIL	SELECTIC	N	
er DB/\	NB/HR		DB/WB/HR		Gross Total	Glass	s			Coil Airflow	Ent	Lvg
°F	gr/lb	°F	°F gr/lb			ft²	(%)		MBh	cfm	°F	°F
61.8	74.8	59.6 5	5.0 68.6	Floor	1.153			Main Htg	-19.2	939	65.3	82.5
0.0	0.0		0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.0
70.2	93.8	92.0 6		Int Doo				Preheat	0.0	0	0.0	0.0
10.2	33.0	52.0 0	0.0 00.0	ExFir	0			riencat	0.0	0	0.0	0.0
				Roof	285	0	0	Humidif	0.0	0	0.0	0.0
				Wall	425	274		Opt Vent	-4.7	81	-7.0	55.0
				Ext Do		0		Total	-23.9			
					. .	<u> </u>			20.0			

TRACE® 700 v6.3.5 calculated at 10:20 AM on 05/19/2022 Alternative - 1 System Checksums Report Page 201 of 768

WILLIAW WILLIAW WILLIAW WILLIAW WILLIAW WILLIAW WILLIAW WILLIAW	
Reserved for permit stamp)
Olson Kundig Ise South Jackson St, Suite 600 Seattle, Washington 98104 USA +1 206 624 5670 olsonkundig.com	project: SOMMET BLANC 9300 Marsac Ave (B2 East Parcel) Park City, Utah 84060
Aspen Group PO Box 98 Park City, Uta	30022
Pool ConsultantCloward H202696 N University Ave, SProvo, UT 84604Landscape ArchitectEPG Design6949 South High Tech DMidvale, Utah 84047Specifications WriterFriday Group88 Mainelli RoadMiddlebury, VTCode ConsultantHolmes600 1st Avenue, Suite 20Seattle, WA 98104Fire Protection EngineerJensen HughesOne Research Drive, SuWestborough, MA 01587Vertical Transportation OLerch Bates19515 North Creek ParkBothell, WA 98011Structural EngineerMagnusson Klemencic1301 5th Ave, Suite 3200Seattle, WA 98101Lighting DesignerO-1319 SE MLK Blvd, SuittPortland, Oregon 97219Building Envelope ConstrRDH2101 N 34th StSeattle, WA 98103	e 210
Seattle, WA 98103 <u>Accessibility Consultant</u> Studio Pacifica 2144 Westlake Ave N, S Seattle, WA 98109 <u>MEP Engineer</u> WSP USA 1001 Fourth Ave., Suite Seattle, WA 98154	
 checked by job no.	

no. date bv

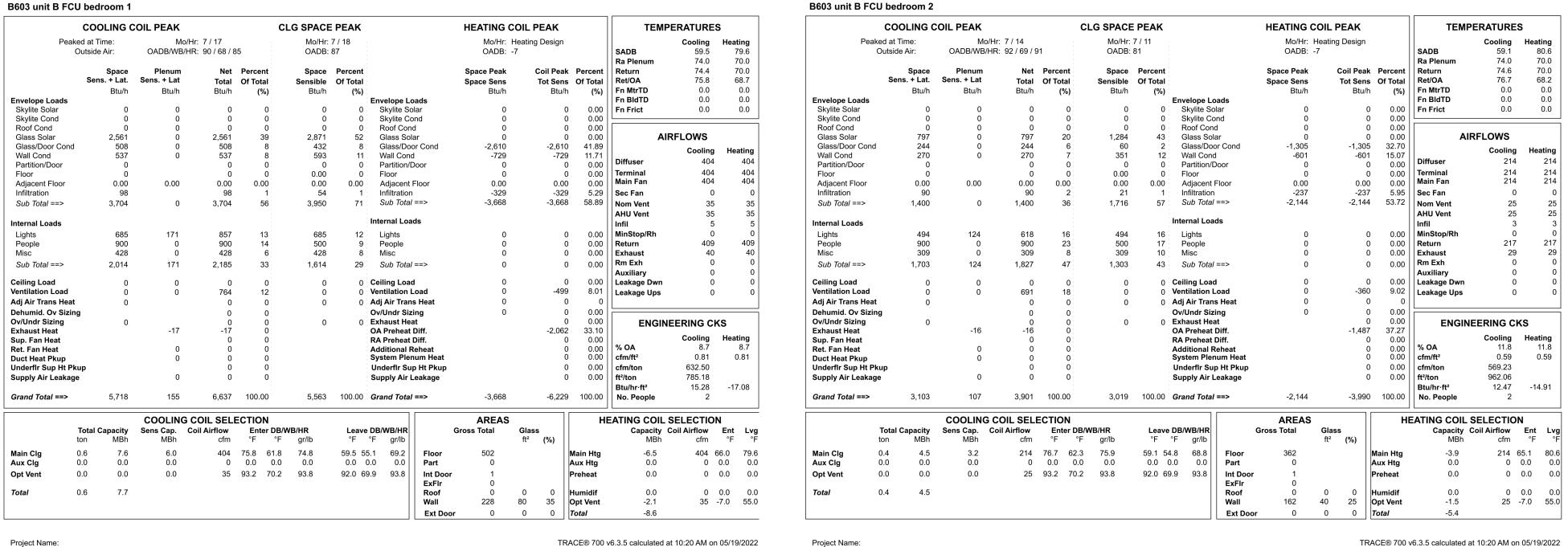
> ISSUE FOR CONSTRUCTION 11/18/2022

HVAC LOAD CALCULATION M0.08

RESIDENTIAL FAN COIL UNITS HVAC LOADS (CONT)

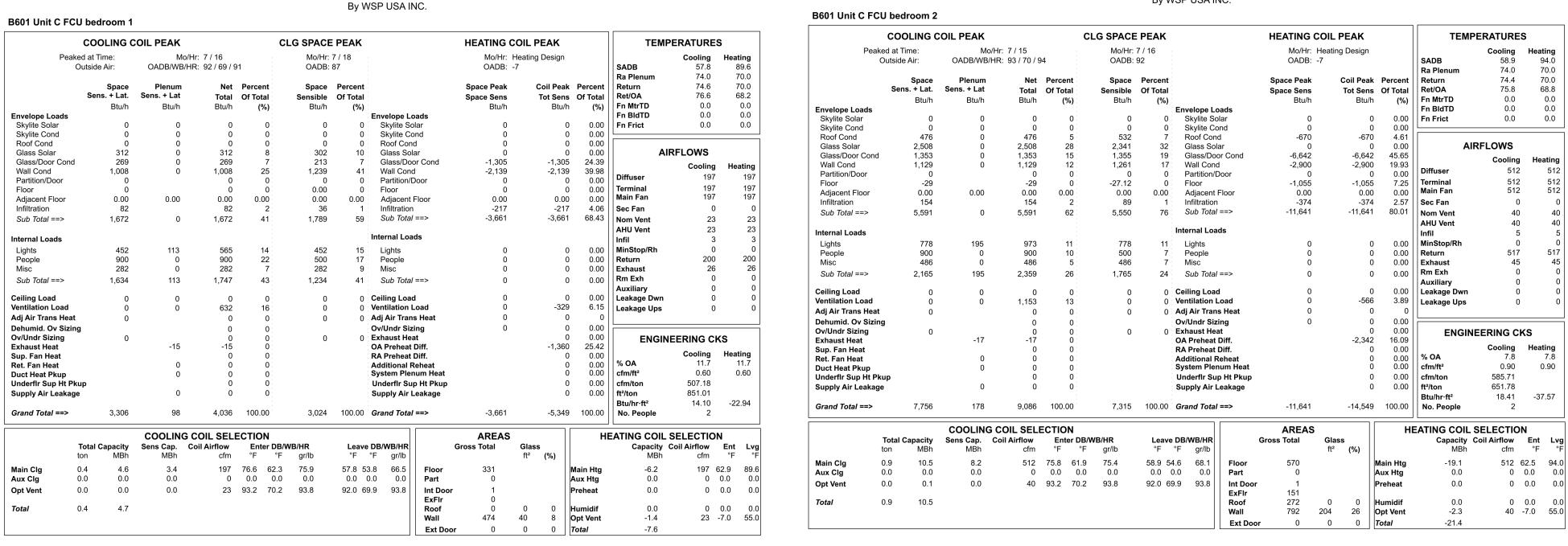
Zone Checksums By WSP USA INC.

Zone Checksums



Project Name: Dataset Name: SOMMET220519.TRC

TRACE® 700 v6.3.5 calculated at 10:20 AM on 05/19/2022 Alternative - 1 System Checksums Report Page 202 of 768



Project Name:

Dataset Name: SOMMET220519.TRC

Project Name: Dataset Name: SOMMET220519.TRC

Project Name

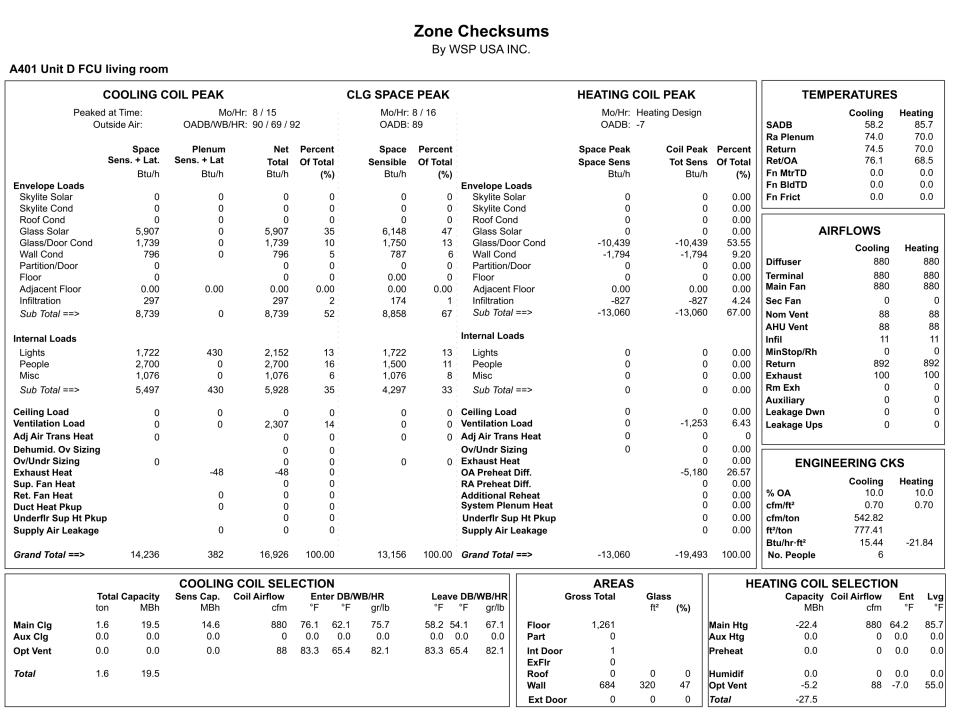
Project Name:

Dataset Name: SOMMET220519.TRC

Dataset Name: SOMMET220519.TRC

TRACE® 700 v6.3.5 calculated at 10:20 AM on 05/19/2022 Alternative - 1 System Checksums Report Page 192 of 768

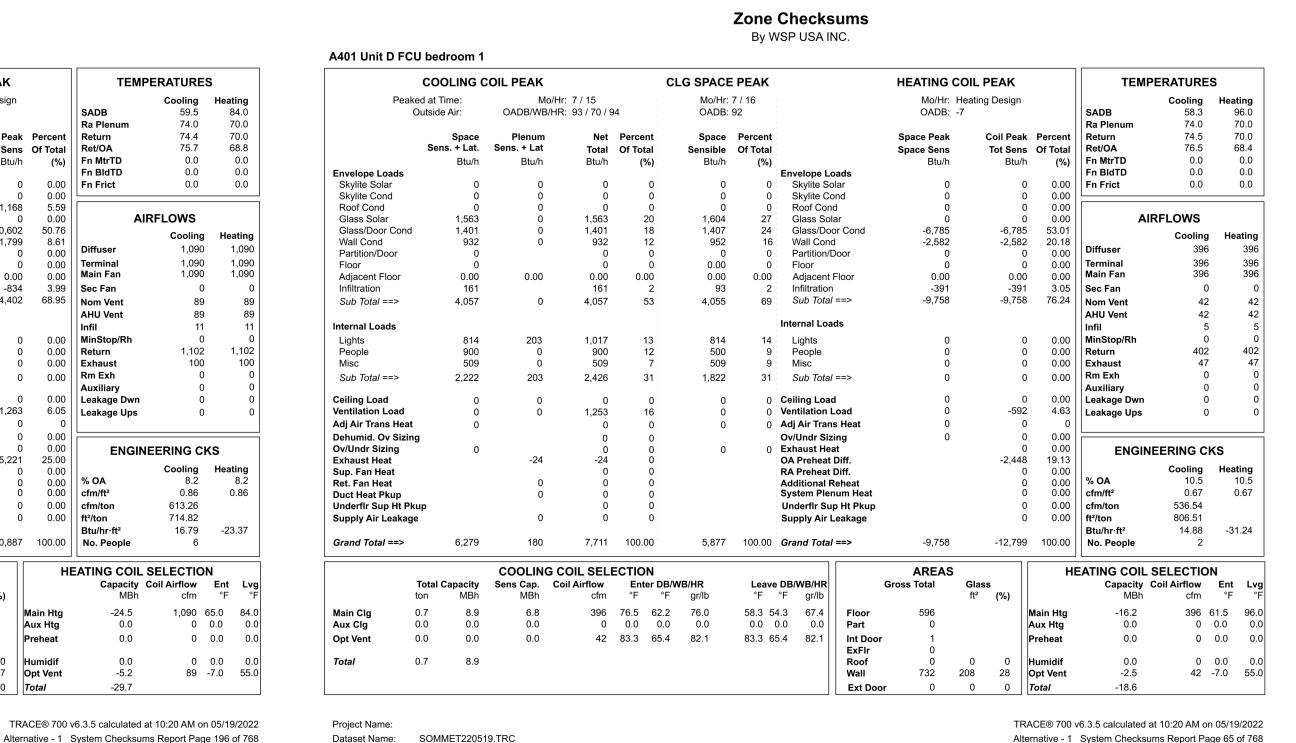
B601 Unit C I	FCU L	ivina Roo	m					Zone _{By V}		ecks USA II									
		•	OIL PEAK			С	LG SPACE	PEAK				HEATING		PEAK		ТЕМ	PERATURE	S	
P	eaked a Outs	t Time: ide Air:		Hr: 7/17 R: 90/68/8	35		Mo/Hr: OADB:					Mo/Hr OADB		g Design		SADB	Cooling 59.5	Hea	ating 84.0
	s	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Perce Of Tot	al	Space Sensible	Percent Of Total	Ę.			Space Peal Space Sens	5	Coil Peak Tot Sens	Of Total	Ra Plenum Return Ret/OA	74.0 74.4 75.7		70.0 70.0 68.8
		Btu/h	Btu/h	Btu/h	(9	6)	Btu/h	(%)				Btu/ł	۱	Btu/h	(%)	Fn MtrTD	0.0		0.0
Envelope Loads Skylite Solar	S	0	0	0		0	0	C		elope Lo kylite So		()	0	0.00	Fn BldTD Fn Frict	0.0 0.0		0.0 0.0
Skylite Cond		0	0	0		0	0	C		kylite Co)	0	0.00	FILFIC	0.0		0.0
Roof Cond		980	0	980		5	968	6		oof Con		-1,168	-	-1,168	5.59				
Glass Solar		6,520	0	6,520	:	35	6,964	46		lass So)	0	0.00	A	IRFLOWS		
Glass/Door Co	ond	2,049	0	2,049		11	1,743	12	G	lass/Do	or Cond	-10,602	2	-10,602	50.76			. Ца	
Wall Cond		820	0	820		4	842	6	6 W	/all Con	d	-1,799	Э	-1,799	8.61		Cooling		eating
Partition/Door		0		0		0	0	C	Pa	artition/l	Door	()	0	0.00	Diffuser	1,090		1,090
Floor		0		0		0	0.00	C	FI FI	loor)	0	0.00	Terminal	1,090		1,09
Adjacent Floor	r	0.00	0.00	0.00	0.0		0.00	0.00		djacent		0.00		0.00	0.00	Main Fan	1,090		1,090
Infiltration		249		249		1	156	1		filtratior		-834		-834	3.99	Sec Fan	C		(
Sub Total ==>		10,617	0	10,617	:	57	10,673	71	S	ub Tota	==>	-14,402	2	-14,402	68.95	Nom Vent	89	9	89
																AHU Vent	89	9	89
Internal Loads									Inter	rnal Loa	ids					Infil	11	l	1
Lights		1,735	434	2,169		2	1,735	12	Li Li	ghts		()	0	0.00	MinStop/Rh	C		(
People		2,700	0	2,700		15	1,500	10		eople)	0	0.00	Return	1,102		1,102
Misc		1,084	0	1,084		6	1,084	7	'; M	lisc		()	0	0.00	Exhaust	100		10
Sub Total ==>		5,520	434	5,953	;	32	4,320	29	S	ub Total	==>	()	0	0.00	Rm Exh	C		(
													_			Auxiliary	C	-	(
Ceiling Load		0	0	0		0	0	C		ing Loa)	0		Leakage Dwn	C	-	(
Ventilation Load		0	0	1,935		10	0	C		tilation)	-1,263	6.05	Leakage Ups	C)	(
Adj Air Trans H		0		0		0	0	C		Air Tran)	0	0				
Dehumid. Ov Si	-			0		0				Jndr Siz	•	()	0	0.00				
Ov/Undr Sizing	I	0	10	0		0	0	C		aust He				0	0.00	ENGI	NEERING C	KS	
Exhaust Heat			-40	-40 0		0				Preheat				-5,221 0	25.00 0.00		Cooling	Hea	ating
Sup. Fan Heat Ret. Fan Heat			0	0		0				Preheat itional F				0	0.00	% OA	8.2	neu	8.2
Duct Heat Pkup	`		0	0		0					num Heat			0	0.00	cfm/ft ²	0.86		0.86
Underfir Sup Ht			0	0		0					p Ht Pkup			0	0.00	cfm/ton	613.26		
Supply Air Leak			0	0		0					Leakage			0	0.00	ft²/ton	714.82		
Cuppij / II Loui	nugo		Ŭ	0					oup	pij / lii i	Loundgo				0.00	Btu/hr·ft ²	16.79	-2	23.37
Grand Total ==:	:>	16,137	394	18,466	100.0	00	14,993	100.00	Grai	nd Totai	==>	-14,402	2	-20,887	100.00	No. People	6	_	0.01
			COOLING	COIL SELI	ЕСТІО	N						AREA	s		H	EATING COIL	SELECTIO	N	
	Tota ton	al Capacity MBh	Sens Cap. O MBh	cfm cfm	Ent °F	er DB/ °F	WB/HR gr/lb	Leav °F	°F	VB/HR gr/lb		Gross Total	Glas ft ²	ss (%)		Capacity MBh	Coil Airflow cfm	Ent °F	t Lv
Main Clg	1.8	21.2	16.6	1,090	75.7	61.8	74.8	59.5	54.8	68.0	Floor	1,271			Main Htg	-24.5	1,090	65.0	84
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	0.1	0.1	89	93.2		93.8	92.0		93.8	Int Door ExFlr	1 0			Preheat	0.0	0	0.0	0
Total	1.8	21.3									Roof	474	0	o	Humidif	0.0	0	0.0	0
, 0101	1.0	21.0									Wall	690	325		Opt Vent	-5.2		-7.0	
											Ext Doo		0		Total	-29.7	00		00
												. 0	0	0	iulai	-29.1			

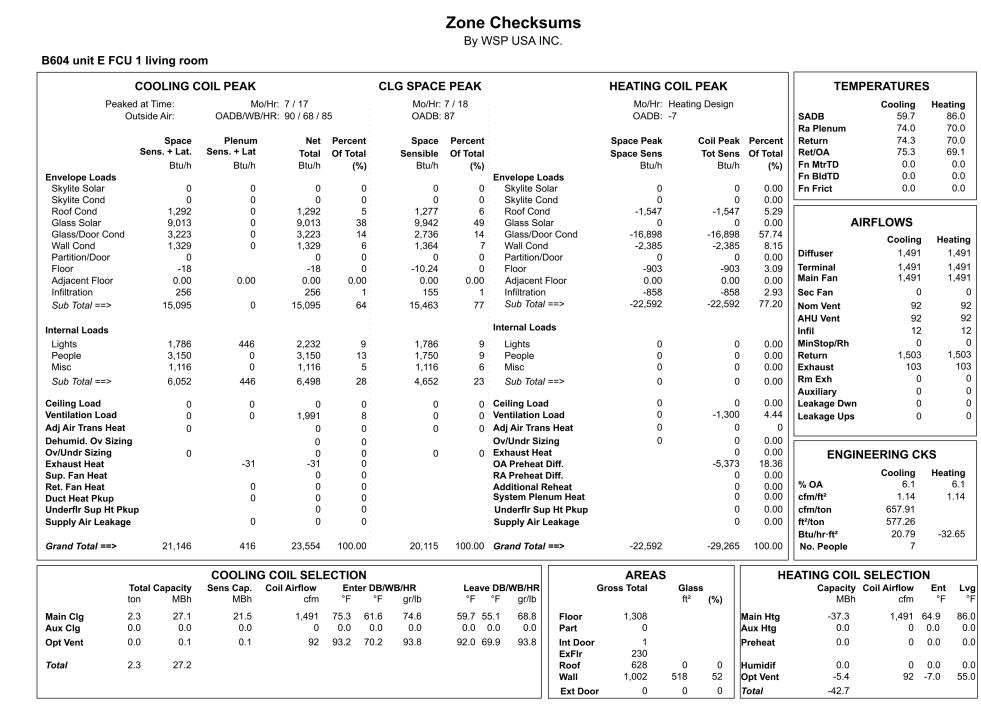


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Project Name Dataset Name: SOMMET220519.TRC

Zone Checksums By WSP USA INC.





Project Name: Dataset Name: SOMMET220519.TRC

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Zone Checksums By WSP USA INC.

Envelope Loads

Skvlite Solar

Skylite Cond

Roof Cond

Glass Solar

Wall Cond

Partition/Door

Adiacent Floor

Sub Total ==>

Infiltration

Internal Loads

Sub Total ==>

Ventilation Load

Adj Air Trans Heat

Dehumid. Ov Sizine

Ov/Undr Sizing

Exhaust Heat

Sup. Fan Heat

Ret. Fan Heat

Duct Heat Pkup

Supply Air Leakage

Grand Total ==>

Main Clg

Aux Clg

Opt Vent

Proiect Name:

Envelope Loads

Skylite Solar

Skylite Cond

Glass Solar

Wall Cond

Floor

Partition/Door

Adjacent Floor

Sub Total ==>

Internal Loads

Sub Total ==>

Ventilation Load

Adj Air Trans Heat

Ov/Undr Sizing

Exhaust Heat

Sup. Fan Heat

Ret. Fan Heat

Duct Heat Pkup

Underflr Sup Ht Pkup

Supply Air Leakage

Grand Total ==>

Main Clg

Aux Clg

Total

Opt Vent

Project Name:

Envelope Loads

Skylite Solar

Skylite Cond

Roof Cond

Glass Solar

Wall Cond

Partition/Door

Adiacent Floor

Sub Total ==>

Sub Total ==>

Ventilation Load

Adj Air Trans Heat

Dehumid, Ov Sizin

Ov/Undr Sizina

Sup. Fan Heat

Duct Heat Pkup

Underflr Sup Ht Pkup

Supply Air Leakage

0.4

Ret. Fan Heat

Main Clg

Aux Clg

Opt Vent

Project Name:

Envelope Loads

Skylite Solar

Skylite Cond

Roof Cond

Glass Solar

Wall Cond

Infiltration

Lights People

Misc

Floor

Partition/Door

Adjacent Floor

Sub Total ==>

Internal Loads

Sub Total ==>

Ceiling Load

Ventilation Load

Ov/Undr Sizing

Exhaust Heat

Sup. Fan Heat

Ret. Fan Heat

Duct Heat Pkup

Main Clg

Aux Clg

Opt Vent

Project Name:

Dataset Name: SOMMET220519.TRC

Total

Supply Air Leakage

Grand Total ==>

Adj Air Trans Heat

Dehumid. Ov Sizina

Glass/Door Cond

Total

Exhaust Heat

Infiltration

Internal Loads

Lights People

Ceiling Load

Floor

Glass/Door Cond

Dehumid. Ov Sizing

Ceiling Load

Lights

People

Misc

Infiltration

Glass/Door Cond

Roof Cond

B601 Unit C FCU bedroom 3

Peaked at Time:

Outside Air:

COOLING COIL PEAK

Sens. + Lat. Sens. + Lat

Space

Btu/h

0.00

979

1,656

2,635

ton MBh

0.3 3.9

0.0 0.0

0.3 4.0

0.0

Dataset Name: SOMMET220519.TRC

0.0

Mo/Hr: 7 / 15

Net Percent

(%)

0.00

Total Of Total

Btu/h

318

270

299

0.00

979

582

900 291

690

0 0 0

Sens Cap. Coil Airflow Enter DB/WB/HR

COOLING COIL SELECTION

1,773 52

OADB/WB/HR: 93 / 70 / 94

Plenum

Btu/h

0.00

0

116

0

0

-24

0

0

MBh

0.0

116

Total

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Ceiling Load

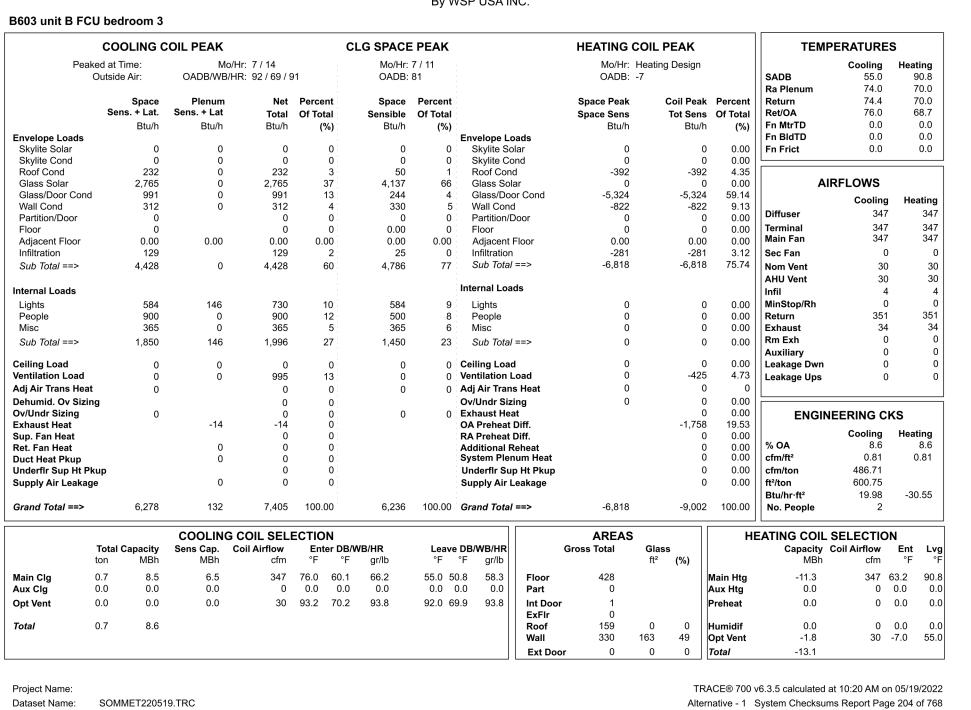
Lights

Misc

People

Floor

Glass/Door Cond



Zone Checksums

By WSP USA INC.

Envelope Loa

0 Skylite Solar

Skylite Cond

Roof Cond

Glass Solar

Wall Cond

Floor

43 Sub Total ==>

21 Lights

57 Sub Total ==>

0 Ceiling Load

0 Exhaust Heat

Leave DB/WB/HR

°F °F gr/lb

55.5 51.8 61.7 Floor

92.0 69.9 93.8 Int Door

Wall

Ext Door

0.0 0.0 0.0 Part

0 Ventilation Load

0 Adj Air Trans Heat

Ov/Undr Sizing

OA Preheat Diff.

RA Preheat Diff.

Additional Reheat

System Plenum Hea

Underflr Sup Ht Pkup

Supply Air Leakage

50023People29113Misc

Internal Loads

Partition/Door

Adjacent Floor

Infiltration

Glass/Door Cond

HEATING COIL PEAK

OADB: -7

Space Peak

Space Sens

Btu/h

-1.305

Mo/Hr: Heating Design

CLG SPACE PEAK

Mo/Hr: 7 / 16

Space Percent

Btu/h (%)

Sensible Of Total

319

0.00

0.00

960

466

1,256

92 3,417 100.00 2,217 100.00 Grand Total ==>

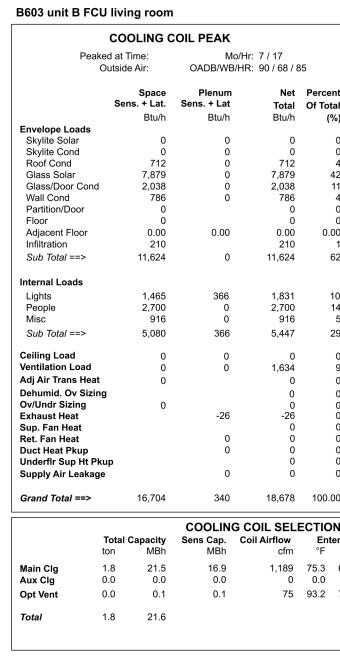
cfm °F °F gr/lb

127 78.2 63.1 77.6

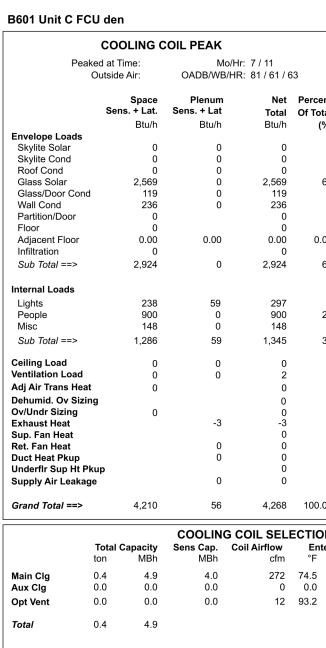
0 0.0 0.0 0.0

24 93.2 70.2 93.8

OADB: 92

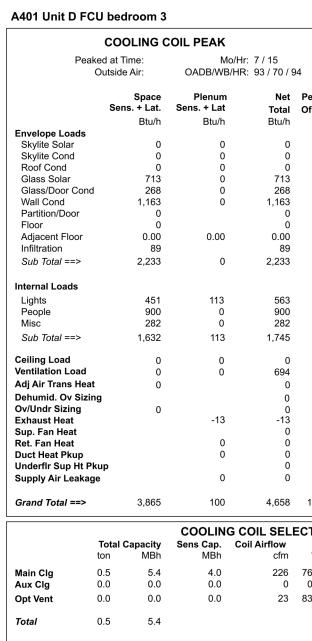


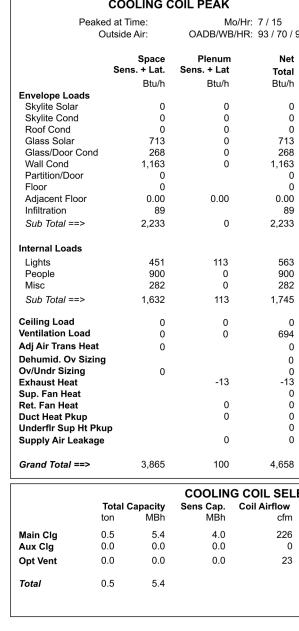
Project Name: Dataset Name: SOMMET220519.TRC



Project Name:

Dataset Name: SOMMET220519.TRC



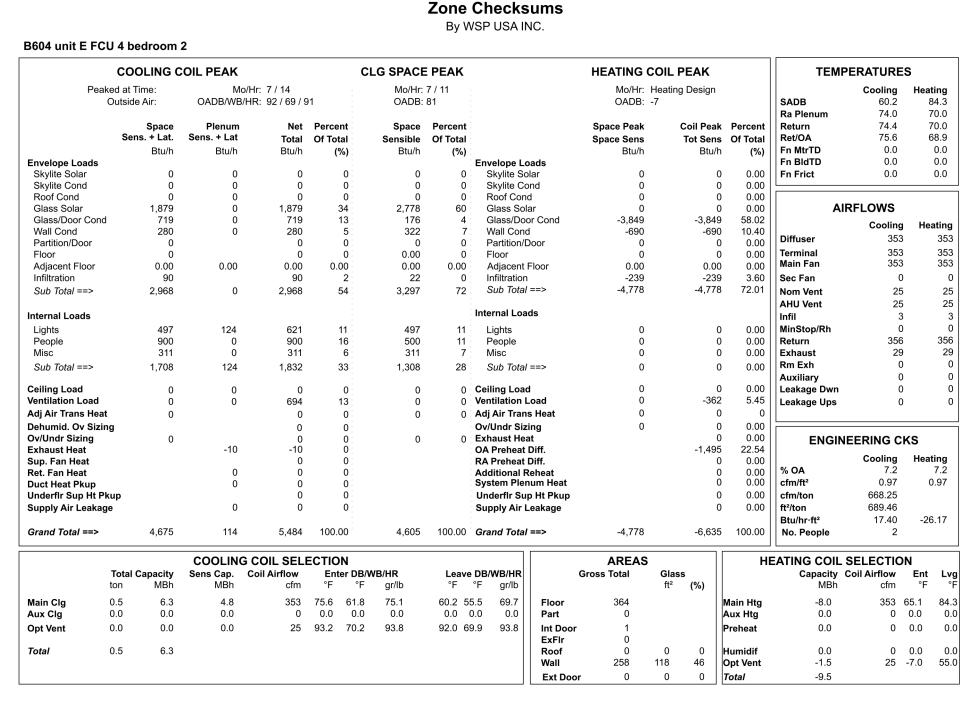


Project Name:

Project Name

Dataset Name: SOMMET220519.TRC

Dataset Name: SOMMET220519.TRC



Cooling Heating -986 23.17 -986 0.00 Diffuser 0 0.00 || **Terminal** 0.00 0.00 || **Main Fan** 0.00 -224 5.26 Sec Fan -2,514 59.10 **Nom Vent** -2.514 AHU Vent 24 Infil 0 0.00 | | **MinStop/Rh** 0 0.00 Return 0 0.00 **Exhaust** 0 0.00 **Rm Exh** Auxiliarv 0 0.00 Leakage Dwn -339 7.97 🛛 Leakage Ups 0 0 || 0 0.00 0 0.00 -1,401 32.93 ENGINEERING CKS Cooling Heating 0 0.00 18.9 0.00 || % **OA** 0.00 cfm/ft² 0.37 0.37 0 0.00 **cfm/ton** 383.90 0 0.00 **ft²/ton** 1,034.13 Btu/hr∙ft² 11.60 -17.18 -4,254 100.00 || **No. People** -2,514 2 HEATING COIL SELECTION AREAS Gross Total Glass Capacity Coil Airflow Ent Lvg ft² (%) MBh cfm °F 127 61.2 91.0 -4 5 Main Htg Aux Htg 0 0.0 0.0 Preheat 0 0.0 0.0 0.0 0.0 0 0.0 0.0 0 Humidif 40 17 Opt Vent -1.4 24 -7.0 55.0 240 Total

TEMPERATURES

AIRFLOWS

Ra Plenum

En BldTD

Coil Peak Percent Return

Tot Sens Of Total Ret/OA

0 0.00

-1,305 30.68

Btu/h (%) Fn MtrTD

0.00

0.00

0 0.00 Fn Frict

Cooling Heating

70.0

67.2

70.0

55.5

74.0

75.0 78.2

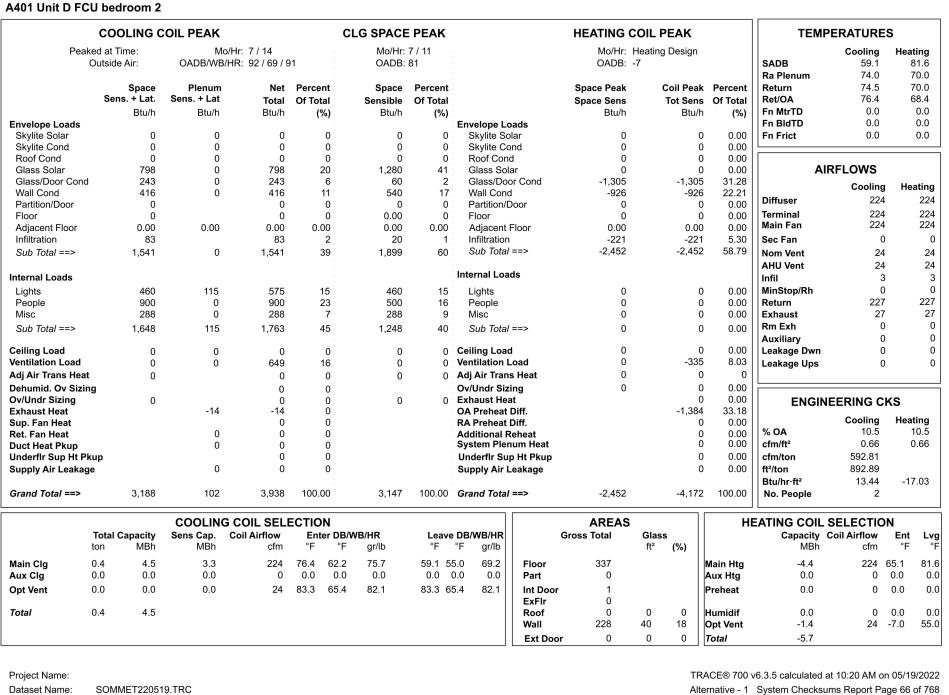
0.0

0.0

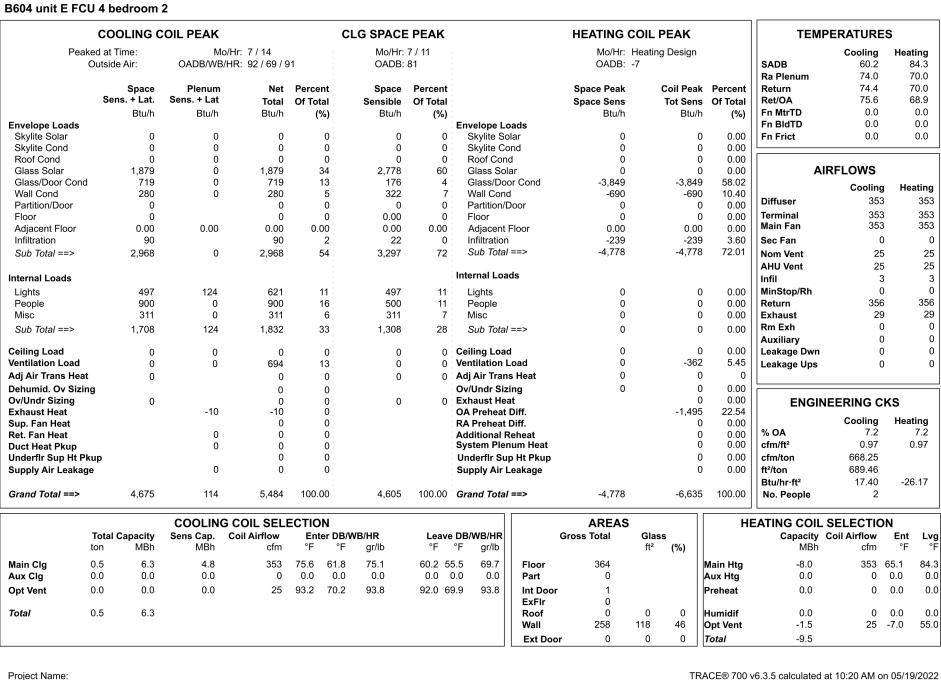
0.0 0.0

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Zone Checksums By WSP USA INC.



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Zone Checksums By WSP USA INC.

CL	.G SPACE	PEAK			HEATING (COIL F	PEAK		TEMP	ERATURE	S
	Mo/Hr:	7 / 18			Mo/Hr:	Heating	Design			Cooling	Heating
	OADB:	87			OADB:	0	, . . .		SADB	59.7	81.8
									Ra Plenum	74.0	70.0
nt	Space	Percent			Space Peak		Coil Peak	Percent	Return	74.3	70.0
al	Sensible	Of Total			Space Sens		Tot Sens		Ret/OA	75.3	69.1
	Btu/h				Btu/h		Btu/h		Fn MtrTD	0.0	0.0
6)	Blu/II	(%)	Envelope Lo	ada	Dlu/II		Blu/II	(%)	Fn BldTD	0.0	0.0
0	0	0	Skylite Sc		0		0	0.00	Fn Frict	0.0	0.0
0	0	0	Skylite Co		0		0	0.00		0.0	0.0
4	703	4	Roof Con		-848		-848	4.53			
2	8.841	55	Glass Sol		0+0-		0+0-			RFLOWS	
1	1,733	11	Glass/Do		-10,545		-10,545	56.40	^"		
4	842	5	Wall Cond		-1,127		-1,127	6.03		Cooling	Heating
0	042	0	Partition/[-1,127		0		Diffuser	1,189	1,189
0	0.00	0	Floor		0		0		Terminal	1,189	1,189
0	0.00	0.00	Adjacent	Floor	0.00		0.00		Main Fan	1,189	1,189
1	138	0.00	Infiltration		-704		-704	3.76	Sec Fan	0	, (
52	12,257	76	Sub Total		-13,224		-13,224	70.72	Nom Vent	75	75
~	12,207	10		-	10,224		10,224	10.12			75
			Internal Loa	de					AHU Vent	75	
				43					Infil	10	10
0	1,465	9	Lights		0		0		MinStop/Rh	0	(
4	1,500	9	People		0		0		Return	1,199	1,199
5	916	6	Misc		0		0	0.00	Exhaust	85	85
9	3,880	24	Sub Total	==>	0		0	0.00	Rm Exh	0	(
									Auxiliary	0	(
0	0	0	Ceiling Load	t	0		0	0.00	Leakage Dwn	0	(
9	0	0	Ventilation I	₋oad	0		-1,066	5.70	Leakage Ups	0	(
0	0	0	Adj Air Tran	s Heat	0		0	0			
0			Ov/Undr Siz	ing	0		0	0.00			
0	0	0	Exhaust He	at			0	0.00	ENGINI	EERING CI	(S
0			OA Preheat	Diff.			-4,408	23.57			
0			RA Preheat	Diff.			0	0.00		Cooling	Heating
0			Additional F	Reheat			0		% OA	6.3	6.3
0			System Plei	num Heat			0	0.00	cfm/ft²	1.11	1.11
0			Underflr Su	p Ht Pkup			0	0.00	cfm/ton	661.88	
0			Supply Air I	eakage			0	0.00	ft²/ton	597.07	
									Btu/hr·ft ²	20.10	-24.92
0	16,138	100.00	Grand Total	==>	-13,224		-18,698	100.00	No. People	6	
N					AREAS			Н		SELECTIO	N
r DB/W	/B/HR	Leave	DB/WB/HR		Gross Total	Glass	s		Capacity C	Coil Airflow	Ent Lv
°F	gr/lb	°F	°F gr/lb			ft²	(%)		MBh	cfm	°F
61.6	74.6	59.7 5	5.2 69.2	Floor	1,073			Main Lite	-22.3	1.189	65.9 81
0.0	0.0		0.0 0.0	Ploor	1,073			Main Htg Aux Htg	-22.3	1,169	0.0 0
								•			
70.2	93.8	92.0 69	9.9 93.8	Int Door	1			Preheat	0.0	0	0.0 0
				ExFlr	0	0			~ ~	~	0.0 0
				Roof	344	0		Humidif	0.0	0	0.0 0
				Wall	552	323		Opt Vent	-4.4	75	-7.0 55
				Ext Door	· 0	0	0	Total	-26.7		

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Zone Checksums By WSP USA INC.

	CLG SPACE	PEAK			HEATING (PEAK		TEM	PERATURE	S	
	Mo/Hr: OADB:				Mo/Hr: OADB:		g Design		SADB	Cooling 59.2	Heat 8	t ing 32.2
									Ra Plenum	74.0	7	0.0
cent	Space	Percent			Space Peak		Coil Peak	Percent	Return	74.2	7	0.0
Total	Sensible	Of Total			Space Sens		Tot Sens	Of Total	Ret/OA	74.5	6	69.3
(%)	Btu/h	(%)			Btu/h		Btu/h	(%)	Fn MtrTD	0.0		0.0
(,		()/	Envelope Lo	ads				()	Fn BldTD	0.0		0.0
0	0	0	Skylite So	lar	0		0	0.00	Fn Frict	0.0		0.0
0	0	0	Skylite Co	nd	0		0	0.00				
0	0	0	Roof Con		0		0					
60	2,569	67	Glass Sol		0		0	0.00	A	IRFLOWS		
3	119	3	Glass/Doo		-2,610		-2,610			Cooling	Hea	ating
6	236	6	Wall Cond		-404		-404	10.06	Diffuser	272		272
0	0	0	Partition/E	Door	0		0		Terminal	272		272
0	0.00	0	Floor		0		0		Main Fan	272		272
0.00	0.00	0.00	Adjacent	loor	0.00		0.00					
0	10	0	Infiltration		-114		-114	2.84	Sec Fan	0		0
68	2,934	77	Sub Total	==>	-3,128		-3,128	77.89	Nom Vent	12		12
			Internal Loa	da					AHU Vent	12		12
			internal Loa	us					Infil	2		2
7	238	6	Lights		0		0		MinStop/Rh	0		0
21	500	13	People		0		0		Return	273		273
3	148	4	Misc		0		0	0.00	Exhaust	14		14
32	886	23	Sub Total	==>	0		0	0.00	Rm Exh	0		0
									Auxiliary	0		0
0	0	0	Ceiling Load		0		0		Leakage Dwn	0		0
0	0	0	Ventilation L		0		-173		Leakage Ups	0		0
0	0	0	Adj Air Tran	s Heat	0		0	-				
0			Ov/Undr Siz	•	0		0					
0	0	0	Exhaust Hea				0		ENGI	IEERING C	KS	
0			OA Preheat				-715			Cooling	Heat	ina
0			RA Preheat				0		% OA	4.5	пеа	4.5
0			Additional R System Pler				0 0		cfm/ft ²	1.56	1	.56
0			Underfir Su				0		cfm/ton	662.92		.00
0				•			0		ft²/ton	424.19		
0			Supply Air L	.eakage			0	0.00		28.29	22	8.75
00.00	3.820	100.00	Grand Total	>	-3,128		-4,016	100.00	Btu/hr·ft² No. People	20.29	-33	0.75
0.00	3,820	100.00	Granu Totai	/	-3,120		-4,010	100.00	No. People	2		
ION					AREAS			н	EATING COIL	SELECTIO	N	
	B/WB/HR	Leave	DB/WB/HR		Gross Total	Glas	s			Coil Airflow	Ent	Lvg
	F gr/lb	°F	°F gr/lb		erese retar	ft ²	(%)		MBh	cfm	°F	
	9		3		474							
5 61		59.2 5		Floor	174			Main Htg	-5.2	272		82.2
0 0.			0.0 0.0	Part	0			Aux Htg	0.0	0	0.0	0.0
2 70	2 93.8	92.0 6	9.9 93.8	Int Door				Preheat	0.0	0	0.0	0.0
				ExFlr	0					-		
				Roof	0	0		Humidif	0.0	0	0.0	0.0
				Wall	162	80		Opt Vent	-0.7	12	-7.0	55.0
				Ext Doo	r 0	0	0	Total	-5.9			

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TRACE® 700 v6.3.5 calculated at 10:20 AM on 05/19/2022

Zone Checksums By WSP USA INC.

	CLG SPACE	PEAK			HEATING	COIL P	EAK		TEMF	PERATURE	S	
	Mo/Hr: OADB:				Mo/Hr: OADB:	Heating -7	Design		SADB Ra Plenum	Cooling 57.7 74.0		ing 8.1
Percent	Space	Percent			Space Peak		Coil Book	Percent	Ra Plenum Return	74.0 74.5		0.0
Of Total	Sensible	Of Total			Space Sens			Of Total	Ret/OA	74.3		8.5
	Btu/h				Space Sens Btu/h		Btu/h		Fn MtrTD	0.0		0.0
(%)	Dlu/II	(%)	Envelope Lo	ada	Dlu/II		Dlu/II	(%)	Fn BldTD	0.0		0.0
0	0	0	Skylite Sc		0		0	0.00	Fn Frict	0.0		0.0
0	0	0	Skylite Co		0		0	0.00	FILFICE	0.0		0.0
0	0	0	Roof Con		0		0	0.00				
15	922	26	Glass Sol		0		0	0.00	Δι	RFLOWS		
6	195	6	Glass/Do		-1,305		-1,305	23.51				
25	1,088	31	Wall Cond		-2,346		-2,346	42.26		Cooling	Hea	ating
0	0	0	Partition/[2,040		2,040	0.00	Diffuser	226		226
0	0.00	Õ	Floor		0		0	0.00	Terminal	226		226
0.00	0.00	0.00	Adjacent	Floor	0.00		0.00	0.00	Main Fan	226		226
2	44	0.00	Infiltration		-216		-216	3.90	Sec Fan	0		0
48	2,250	65	Sub Total		-3,867		-3.867	69.67	Nom Vent	23		23
40	2,230	05	Oub rolar		0,007		0,007	00.07	AHU Vent	23		23
			Internal Loa	ds								
				45					Infil	3		3
12	451	13	Lights		0		0	0.00	MinStop/Rh	0		0
19	500	14	People		0		0	0.00	Return	229		229
6	282	8	Misc		0		0	0.00	Exhaust	26		26
37	1,232	35	Sub Total	==>	0		0	0.00	Rm Exh	0		0
									Auxiliary	0		0
0	0	0	Ceiling Load		0		0	0.00	Leakage Dwn	0		0
15	0	0	Ventilation I	_oad	0		-328	5.91	Leakage Ups	0		0
0	0	0	Adj Air Tran	s Heat	0		0	0				
0			Ov/Undr Siz	ing	0		0	0.00				
0	0	0	Exhaust Hea	at			0	0.00	ENGIN	EERING C	KS	
0			OA Preheat	Diff.			-1,356	24.42				
0			RA Preheat	Diff.			0	0.00		Cooling	Heati	
0			Additional F	Reheat			0	0.00	% OA	10.2		0.2
0			System Pler	num Heat			0	0.00	cfm/ft ²	0.69	0	.69
0			Underflr Su	p Ht Pkup			0	0.00	cfm/ton	506.50		
0			Supply Air L	eakage			0	0.00	ft²/ton	739.24		
				-					Btu/hr·ft ²	16.23	-23	.97
100.00	3,482	100.00	Grand Total	==>	-3,867		-5,551	100.00	No. People	2		
CTION					AREAS	;		HE		SELECTIO	N	
Enter D)B/WB/HR	Leave	BB/WB/HR		Gross Total	Glass	;		Capacity	Coil Airflow	Ent	Lvg
°F	°F gr/lb	°F	°F gr/lb			ft²	(%)		MBh	cfm	°F	°
76.4 62	2.2 75.9	57.7 5	3.7 66.0	Floor	330			Main Htg	-6.6	226	63.6	88.
	0.0 0.0		0.0 0.0	Part	0			Aux Htg	-0.0	220	0.0	0.0
					-			-				
83.3 65	5.4 82.1	83.3 6	5.4 82.1	Int Door				Preheat	0.0	0	0.0	0.0
				ExFlr	0	0			~ ~	<u> </u>	0.0	~
				Roof	0	0		Humidif	0.0	0	0.0	0.0
				Wall	516	40		Opt Vent	-1.4	23	-7.0	55.0
				Ext Doo	or O	0	0	Total	-7.9			

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> HVAC LOAD CALCULATION

> > M0.09

Reserved for permit stamp									
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ASPEN Aspen Group L PO Box 980 Park City, Utak	0022								
Pool Consultant Cloward H202696 N University Ave, Su Provo, UT 84604Landscape Architect EPG Design 6949 South High Tech Dri Midvale, Utah 84047Specifications Writer Friday Group 88 Mainelli Road Middlebury, VTCode Consultant Holmes 600 1st Avenue, Suite 200 Seattle, WA 98104Fire Protection Engineer Jensen Hughes One Research Drive, Suit Westborough, MA 01581Vertical Transportation Co Lerch Bates 19515 North Creek Parkw Bothell, WA 98011Structural Engineer Magnusson Klemencic A 1301 5th Ave, Suite 3200 Seattle, WA 98101Lighting Designer O- 1319 SE MLK Blvd, Suite Portland, Oregon 97219Building Envelope Consult RDH 	ve, Suite 100 DA e 305C <u>insulatant</u> ay, Suite 304 Associates 210 tant								
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ISSUE FO CONSTRUC 11/18/202	TION								