RESIDENTIAL FAN COIL UNITS HVAC LOADS (CONT)

Zone Checksums
By WSP USA INC.

B603 unit B FCU bedroom 1

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 17; Outside Air: OADB/WB/HR: 90 / 68 / 85
CLG SPACE PEAK — Mo/Hr: 7 / 18; OADB: 87
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	2,561	0	2,561	39	2,871	52	Glass Solar	0	0	0.00
Glass/Door Cond	508	0	508	8	432	8	Glass/Door Cond	-2,610	-2,610	41.89
Wall Cond	537	0	537	8	593	11	Wall Cond	-729	-729	11.71
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	98		98	1	54	1	Infiltration	-329	-329	5.29
Sub Total ==>	3,704	0	3,704	56	3,950	71	*Sub Total ==>*	-3,668	-3,668	58.89
Internal Loads							**Internal Loads**			
Lights	685	171	857	13	685	12	Lights	0	0	0.00
People	900	0	900	14	500	9	People	0	0	0.00
Misc	428	0	428	6	428	8	Misc	0	0	0.00
Sub Total ==>	2,014	171	2,185	33	1,614	29	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	764	12	0	0	**Ventilation Load**	0	-499	8.01
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-17	-17	0			**OA Preheat Diff.**		-2,062	33.10
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	5,718	155	6,637	100.00	5,563	100.00	***Grand Total ==>***	-3,668	-6,229	100.00

TEMPERATURES	Cooling	Heating
SADB	59.5	79.6
Ra Plenum	74.0	70.0
Return	74.4	70.0
Ret/OA	75.8	68.7
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	404	404
Terminal	404	404
Main Fan	404	404
Sec Fan	0	0
Nom Vent	35	35
AHU Vent	35	35
Infil	5	5
MinStop/Rh	0	0
Return	409	409
Exhaust	40	40
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	8.7	8.7
cfm/ft²	0.81	0.81
cfm/ton	632.50	
ft²/ton	785.18	
Btu/hr·ft²	15.28	-17.08
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.6	7.6	6.0	404	75.8	61.8	74.8	59.5	55.1	69.2
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	35	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.6	7.7								

AREAS	Gross Total	Glass ft²	(%)
Floor	502		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	228	80	35
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-6.5	404	66.0	79.6
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-2.1	35	-7.0	55.0
Total	-8.6			

Project Name:
Dataset Name: SOMMET220519.TRC
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Zone Checksums
By WSP USA INC.

B603 unit B FCU bedroom 2

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 14; Outside Air: OADB/WB/HR: 92 / 69 / 91
CLG SPACE PEAK — Mo/Hr: 7 / 11; OADB: 81
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	797	0	797	20	1,284	43	Glass Solar	0	0	0.00
Glass/Door Cond	244	0	244	6	60	2	Glass/Door Cond	-1,305	-1,305	32.70
Wall Cond	270	0	270	7	351	12	Wall Cond	-601	-601	15.07
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	90		90	2	21	1	Infiltration	-237	-237	5.95
Sub Total ==>	1,400	0	1,400	36	1,716	57	*Sub Total ==>*	-2,144	-2,144	53.72
Internal Loads							**Internal Loads**			
Lights	494	124	618	16	494	16	Lights	0	0	0.00
People	900	0	900	23	500	17	People	0	0	0.00
Misc	309	0	309	8	309	10	Misc	0	0	0.00
Sub Total ==>	1,703	124	1,827	47	1,303	43	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	691	18	0	0	**Ventilation Load**	0	-360	9.02
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-16	-16	0			**OA Preheat Diff.**		-1,487	37.27
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	3,103	107	3,901	100.00	3,019	100.00	***Grand Total ==>***	-2,144	-3,990	100.00

TEMPERATURES	Cooling	Heating
SADB	59.1	80.6
Ra Plenum	74.0	70.0
Return	74.6	70.0
Ret/OA	76.7	68.2
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	214	214
Terminal	214	214
Main Fan	214	214
Sec Fan	0	0
Nom Vent	25	25
AHU Vent	25	25
Infil	3	3
MinStop/Rh	0	0
Return	217	217
Exhaust	29	29
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	11.8	11.8
cfm/ft²	0.59	0.59
cfm/ton	569.23	
ft²/ton	962.06	
Btu/hr·ft²	12.47	-14.91
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.4	4.5	3.2	214	76.7	62.3	75.9	59.1	54.8	68.8
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	25	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.4	4.5								

AREAS	Gross Total	Glass ft²	(%)
Floor	362		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	162	40	25
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-3.9	214	65.1	80.6
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.5	25	-7.0	55.0
Total	-5.4			

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Zone Checksums
By WSP USA INC.

B603 unit B FCU bedroom 3

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 14; Outside Air: OADB/WB/HR: 92 / 69 / 91
CLG SPACE PEAK — Mo/Hr: 7 / 11; OADB: 81
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	232	0	232	3	50	1	Roof Cond	-392	-392	4.35
Glass Solar	2,765	0	2,765	37	4,137	66	Glass Solar	0	0	0.00
Glass/Door Cond	991	0	991	13	244	4	Glass/Door Cond	-5,324	-5,324	59.14
Wall Cond	312	0	312	4	330	5	Wall Cond	-822	-822	9.13
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	129		129	2	25	0	Infiltration	-281	-281	3.12
Sub Total ==>	4,428	0	4,428	60	4,786	77	*Sub Total ==>*	-6,818	-6,818	75.74
Internal Loads							**Internal Loads**			
Lights	584	146	730	10	584	9	Lights	0	0	0.00
People	900	0	900	12	500	8	People	0	0	0.00
Misc	365	0	365	5	365	6	Misc	0	0	0.00
Sub Total ==>	1,850	146	1,996	27	1,450	23	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	995	13	0	0	**Ventilation Load**	0	-425	4.73
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-14	-14	0			**OA Preheat Diff.**		-1,758	19.53
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	6,278	132	7,405	100.00	6,236	100.00	***Grand Total ==>***	-6,818	-9,002	100.00

TEMPERATURES	Cooling	Heating
SADB	55.0	90.8
Ra Plenum	74.0	70.0
Return	74.4	70.0
Ret/OA	76.0	68.7
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	347	347
Terminal	347	347
Main Fan	347	347
Sec Fan	0	0
Nom Vent	30	30
AHU Vent	30	30
Infil	4	4
MinStop/Rh	0	0
Return	351	351
Exhaust	34	34
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	8.6	8.6
cfm/ft²	0.81	0.81
cfm/ton	486.71	
ft²/ton	600.75	
Btu/hr·ft²	19.98	-30.55
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.7	8.5	6.5	347	76.0	60.1	66.2	55.0	50.8	58.3
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	30	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.7	8.6								

AREAS	Gross Total	Glass ft²	(%)
Floor	428		
Part	0		
Int Door	1		
ExFlr	0		
Roof	159	0	0
Wall	330	163	49
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-11.3	347	63.2	90.8
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.8	30	-7.0	55.0
Total	-13.1			

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Zone Checksums
By WSP USA INC.

B603 unit B FCU living room

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 17; Outside Air: OADB/WB/HR: 90 / 68 / 85
CLG SPACE PEAK — Mo/Hr: 7 / 18; OADB: 87
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	712	0	712	4	703	4	Roof Cond	-848	-848	4.53
Glass Solar	7,879	0	7,879	42	8,841	55	Glass Solar	0	0	0.00
Glass/Door Cond	2,038	0	2,038	11	1,733	11	Glass/Door Cond	-10,545	-10,545	56.40
Wall Cond	786	0	786	4	842	5	Wall Cond	-1,127	-1,127	6.03
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	210		210	1	138	1	Infiltration	-704	-704	3.76
Sub Total ==>	11,624	0	11,624	62	12,257	76	*Sub Total ==>*	-13,224	-13,224	70.72
Internal Loads							**Internal Loads**			
Lights	1,465	366	1,831	10	1,465	9	Lights	0	0	0.00
People	2,700	0	2,700	14	1,500	9	People	0	0	0.00
Misc	916	0	916	5	916	6	Misc	0	0	0.00
Sub Total ==>	5,080	366	5,447	29	3,880	24	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	1,634	9	0	0	**Ventilation Load**	0	-1,066	5.70
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-26	-26	0			**OA Preheat Diff.**		-4,408	23.57
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	16,704	340	18,678	100.00	16,138	100.00	***Grand Total ==>***	-13,224	-18,698	100.00

TEMPERATURES	Cooling	Heating
SADB	59.7	81.8
Ra Plenum	74.0	70.0
Return	74.3	70.0
Ret/OA	75.3	69.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	1,189	1,189
Terminal	1,189	1,189
Main Fan	1,189	1,189
Sec Fan	0	0
Nom Vent	75	75
AHU Vent	75	75
Infil	10	10
MinStop/Rh	0	0
Return	1,199	1,199
Exhaust	85	85
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	6.3	6.3
cfm/ft²	1.11	1.11
cfm/ton	661.88	
ft²/ton	597.07	
Btu/hr·ft²	20.10	-24.92
No. People	6	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	1.8	21.5	16.9	1,189	75.3	61.6	74.6	59.7	55.2	69.2
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.1	0.1	75	93.2	70.2	93.8	92.0	69.9	93.8
Total	1.8	21.6								

AREAS	Gross Total	Glass ft²	(%)
Floor	1,073		
Part	0		
Int Door	1		
ExFlr	0		
Roof	344	0	0
Wall	552	323	59
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-22.3	1,189	65.9	81.8
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-4.4	75	-7.0	55.0
Total	-26.7			

Project Name:
Dataset Name: SOMMET220519.TRC
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Zone Checksums
By WSP USA INC.

B601 Unit C FCU bedroom 1

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 16; Outside Air: OADB/WB/HR: 92 / 69 / 91
CLG SPACE PEAK — Mo/Hr: 7 / 18; OADB: 87
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	312	0	312	8	302	10	Glass Solar	0	0	0.00
Glass/Door Cond	269	0	269	7	213	7	Glass/Door Cond	-1,305	-1,305	24.39
Wall Cond	1,008	0	1,008	25	1,239	41	Wall Cond	-2,139	-2,139	39.98
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	82		82	2	36	1	Infiltration	-217	-217	4.06
Sub Total ==>	1,672	0	1,672	41	1,789	59	*Sub Total ==>*	-3,661	-3,661	68.43
Internal Loads							**Internal Loads**			
Lights	452	113	565	14	452	15	Lights	0	0	0.00
People	900	0	900	22	500	17	People	0	0	0.00
Misc	282	0	282	7	282	9	Misc	0	0	0.00
Sub Total ==>	1,634	113	1,747	43	1,234	41	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	632	16	0	0	**Ventilation Load**	0	-329	6.15
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-15	-15	0			**OA Preheat Diff.**		-1,360	25.42
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	3,306	98	4,036	100.00	3,024	100.00	***Grand Total ==>***	-3,661	-5,349	100.00

TEMPERATURES	Cooling	Heating
SADB	57.8	89.6
Ra Plenum	74.0	70.0
Return	74.6	70.0
Ret/OA	76.6	68.2
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	197	197
Terminal	197	197
Main Fan	197	197
Sec Fan	0	0
Nom Vent	23	23
AHU Vent	23	23
Infil	3	3
MinStop/Rh	0	0
Return	200	200
Exhaust	26	26
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	11.7	11.7
cfm/ft²	0.60	0.60
cfm/ton	507.18	
ft²/ton	851.01	
Btu/hr·ft²	14.10	-22.94
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.4	4.6	3.4	197	76.6	62.3	75.9	57.8	53.8	66.5
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	23	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.4	4.7								

AREAS	Gross Total	Glass ft²	(%)
Floor	331		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	474	40	8
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-6.2	197	62.9	89.6
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.4	23	-7.0	55.0
Total	-7.6			

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Zone Checksums
By WSP USA INC.

B601 Unit C FCU bedroom 2

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 15; Outside Air: OADB/WB/HR: 93 / 70 / 94
CLG SPACE PEAK — Mo/Hr: 7 / 16; OADB: 92
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	476	0	476	5	532	7	Roof Cond	-670	-670	4.61
Glass Solar	2,508	0	2,508	28	2,341	32	Glass Solar	0	0	0.00
Glass/Door Cond	1,353	0	1,353	15	1,355	19	Glass/Door Cond	-6,642	-6,642	45.65
Wall Cond	1,129	0	1,129	12	1,261	17	Wall Cond	-2,900	-2,900	19.93
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	-29		-29	0	-27.12	0	Floor	-1,055	-1,055	7.25
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	154		154	2	89	1	Infiltration	-374	-374	2.57
Sub Total ==>	5,591	0	5,591	62	5,550	76	*Sub Total ==>*	-11,641	-11,641	80.01
Internal Loads							**Internal Loads**			
Lights	778	195	973	11	778	11	Lights	0	0	0.00
People	900	0	900	10	500	7	People	0	0	0.00
Misc	486	0	486	5	486	7	Misc	0	0	0.00
Sub Total ==>	2,165	195	2,359	26	1,765	24	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	1,153	13	0	0	**Ventilation Load**	0	-566	3.89
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-17	-17	0			**OA Preheat Diff.**		-2,342	16.09
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	7,756	178	9,086	100.00	7,315	100.00	***Grand Total ==>***	-11,641	-14,549	100.00

TEMPERATURES	Cooling	Heating
SADB	58.9	94.0
Ra Plenum	74.0	70.0
Return	74.4	70.0
Ret/OA	75.8	68.8
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	512	512
Terminal	512	512
Main Fan	512	512
Sec Fan	0	0
Nom Vent	40	40
AHU Vent	40	40
Infil	5	5
MinStop/Rh	0	0
Return	517	517
Exhaust	45	45
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	7.8	7.8
cfm/ft²	0.90	0.90
cfm/ton	585.71	
ft²/ton	651.78	
Btu/hr·ft²	18.41	-37.57
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.9	10.5	8.2	512	75.8	61.9	75.4	58.9	54.6	68.1
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.1	0.0	40	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.9	10.5								

AREAS	Gross Total	Glass ft²	(%)
Floor	570		
Part	0		
Int Door	1		
ExFlr	151		
Roof	272	0	0
Wall	792	204	26
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-19.1	512	62.5	94.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-2.3	40	-7.0	55.0
Total	-21.4			

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Zone Checksums
By WSP USA INC.

B601 Unit C FCU bedroom 3

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 15; Outside Air: OADB/WB/HR: 93 / 70 / 94
CLG SPACE PEAK — Mo/Hr: 7 / 16; OADB: 92
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	318	0	318	9	317	14	Glass Solar	0	0	0.00
Glass/Door Cond	270	0	270	8	272	12	Glass/Door Cond	-1,305	-1,305	30.68
Wall Cond	299	0	299	9	319	14	Wall Cond	-986	-986	23.17
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	92		92	3	53	2	Infiltration	-224	-224	5.26
Sub Total ==>	979	0	979	29	960	43	*Sub Total ==>*	-2,514	-2,514	59.10
Internal Loads							**Internal Loads**			
Lights	466	116	582	17	466	21	Lights	0	0	0.00
People	900	0	900	26	500	23	People	0	0	0.00
Misc	291	0	291	9	291	13	Misc	0	0	0.00
Sub Total ==>	1,656	116	1,773	52	1,256	57	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	690	20	0	0	**Ventilation Load**	0	-339	7.97
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-24	-24	-1			**OA Preheat Diff.**		-1,401	32.93
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	2,635	92	3,417	100.00	2,217	100.00	***Grand Total ==>***	-2,514	-4,254	100.00

TEMPERATURES	Cooling	Heating
SADB	55.5	91.0
Ra Plenum	74.0	70.0
Return	75.0	70.0
Ret/OA	78.2	67.2
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	127	127
Terminal	127	127
Main Fan	127	127
Sec Fan	0	0
Nom Vent	24	24
AHU Vent	24	24
Infil	3	3
MinStop/Rh	0	0
Return	130	130
Exhaust	27	27
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	18.9	18.9
cfm/ft²	0.37	0.37
cfm/ton	383.90	
ft²/ton	1,034.13	
Btu/hr·ft²	11.60	-17.18
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.3	3.9	2.7	127	78.2	63.1	77.6	55.5	51.8	61.7
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	24	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.3	4.0								

AREAS	Gross Total	Glass ft²	(%)
Floor	341		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	240	40	17
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-4.5	127	61.2	91.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.4	24	-7.0	55.0
Total	-5.9			

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Zone Checksums
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B601 Unit C FCU den

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 11; Outside Air: OADB/WB/HR: 81 / 61 / 63
CLG SPACE PEAK — Mo/Hr: 7 / 11; OADB: 81
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	2,569	0	2,569	60	2,569	67	Glass Solar	0	0	0.00
Glass/Door Cond	119	0	119	3	119	3	Glass/Door Cond	-2,610	-2,610	64.99
Wall Cond	236	0	236	6	236	6	Wall Cond	-404	-404	10.06
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	0		0	0	10	0	Infiltration	-114	-114	2.84
Sub Total ==>	2,924	0	2,924	68	2,934	77	*Sub Total ==>*	-3,128	-3,128	77.89
Internal Loads							**Internal Loads**			
Lights	238	59	297	7	238	6	Lights	0	0	0.00
People	900	0	900	21	500	13	People	0	0	0.00
Misc	148	0	148	3	148	4	Misc	0	0	0.00
Sub Total ==>	1,286	59	1,345	32	886	23	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	2	0	0	0	**Ventilation Load**	0	-173	4.31
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-3	-3	0			**OA Preheat Diff.**		-715	17.80
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	4,210	56	4,268	100.00	3,820	100.00	***Grand Total ==>***	-3,128	-4,016	100.00

TEMPERATURES	Cooling	Heating
SADB	59.2	82.2
Ra Plenum	74.0	70.0
Return	74.2	70.0
Ret/OA	74.5	69.3
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	272	272
Terminal	272	272
Main Fan	272	272
Sec Fan	0	0
Nom Vent	12	12
AHU Vent	12	12
Infil	2	2
MinStop/Rh	0	0
Return	273	273
Exhaust	14	14
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	4.5	4.5
cfm/ft²	1.56	1.56
cfm/ton	662.92	
ft²/ton	424.19	
Btu/hr·ft²	28.29	-33.75
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.4	4.9	4.0	272	74.5	61.1	73.4	59.2	54.6	67.6
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	12	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.4	4.9								

AREAS	Gross Total	Glass ft²	(%)
Floor	174		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	162	80	49
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-5.2	272	66.1	82.2
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-0.7	12	-7.0	55.0
Total	-5.9			

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Zone Checksums
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B601 Unit C FCU Living Room

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 17; Outside Air: OADB/WB/HR: 90 / 68 / 85
CLG SPACE PEAK — Mo/Hr: 7 / 18; OADB: 87
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	980	0	980	5	968	6	Roof Cond	-1,168	-1,168	5.59
Glass Solar	6,520	0	6,520	35	6,964	46	Glass Solar	0	0	0.00
Glass/Door Cond	2,049	0	2,049	11	1,743	12	Glass/Door Cond	-10,602	-10,602	50.76
Wall Cond	820	0	820	4	842	6	Wall Cond	-1,799	-1,799	8.61
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	249		249	1	156	1	Infiltration	-834	-834	3.99
Sub Total ==>	10,617	0	10,617	57	10,673	71	*Sub Total ==>*	-14,402	-14,402	68.95
Internal Loads							**Internal Loads**			
Lights	1,735	434	2,169	12	1,735	12	Lights	0	0	0.00
People	2,700	0	2,700	15	1,500	10	People	0	0	0.00
Misc	1,084	0	1,084	6	1,084	7	Misc	0	0	0.00
Sub Total ==>	5,520	434	5,953	32	4,320	29	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	1,935	10	0	0	**Ventilation Load**	0	-1,263	6.05
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-40	-40	0			**OA Preheat Diff.**		-5,221	25.00
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	16,137	394	18,466	100.00	14,993	100.00	***Grand Total ==>***	-14,402	-20,887	100.00

TEMPERATURES	Cooling	Heating
SADB	59.5	84.0
Ra Plenum	74.0	70.0
Return	74.4	70.0
Ret/OA	75.7	68.8
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	1,090	1,090
Terminal	1,090	1,090
Main Fan	1,090	1,090
Sec Fan	0	0
Nom Vent	89	89
AHU Vent	89	89
Infil	11	11
MinStop/Rh	0	0
Return	1,102	1,102
Exhaust	100	100
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	8.2	8.2
cfm/ft²	0.86	0.86
cfm/ton	613.26	
ft²/ton	714.82	
Btu/hr·ft²	16.79	-23.37
No. People	6	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	1.8	21.2	16.6	1,090	75.7	61.8	74.8	59.5	54.8	68.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.1	0.1	89	93.2	70.2	93.8	92.0	69.9	93.8
Total	1.8	21.3								

AREAS	Gross Total	Glass ft²	(%)
Floor	1,271		
Part	0		
Int Door	1		
ExFlr	0		
Roof	474	0	0
Wall	690	325	47
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-24.5	1,090	65.0	84.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-5.2	89	-7.0	55.0
Total	-29.7			

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Zone Checksums
By WSP USA INC.

A401 Unit D FCU bedroom 1

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 15; Outside Air: OADB/WB/HR: 93 / 70 / 94
CLG SPACE PEAK — Mo/Hr: 7 / 16; OADB: 92
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	1,563	0	1,563	20	1,604	27	Glass Solar	0	0	0.00
Glass/Door Cond	1,401	0	1,401	18	1,407	24	Glass/Door Cond	-6,785	-6,785	53.01
Wall Cond	932	0	932	12	952	16	Wall Cond	-2,582	-2,582	20.18
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	161		161	2	93	2	Infiltration	-391	-391	3.05
Sub Total ==>	4,057	0	4,057	53	4,055	69	*Sub Total ==>*	-9,758	-9,758	76.24
Internal Loads							**Internal Loads**			
Lights	814	203	1,017	13	814	14	Lights	0	0	0.00
People	900	0	900	12	500	9	People	0	0	0.00
Misc	509	0	509	7	509	9	Misc	0	0	0.00
Sub Total ==>	2,222	203	2,426	31	1,822	31	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	1,253	16	0	0	**Ventilation Load**	0	-592	4.63
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-24	-24	0			**OA Preheat Diff.**		-2,448	19.13
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	6,279	180	7,711	100.00	5,877	100.00	***Grand Total ==>***	-9,758	-12,799	100.00

TEMPERATURES	Cooling	Heating
SADB	58.3	96.0
Ra Plenum	74.0	70.0
Return	74.5	70.0
Ret/OA	76.5	68.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	396	396
Terminal	396	396
Main Fan	396	396
Sec Fan	0	0
Nom Vent	42	42
AHU Vent	42	42
Infil	5	5
MinStop/Rh	0	0
Return	402	402
Exhaust	47	47
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	10.5	10.5
cfm/ft²	0.67	0.67
cfm/ton	536.54	
ft²/ton	806.51	
Btu/hr·ft²	14.88	-31.24
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.7	8.9	6.8	396	76.5	62.2	76.0	58.3	54.3	67.4
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	42	83.3	65.4	82.1	83.3	65.4	82.1
Total	0.7	8.9								

AREAS	Gross Total	Glass ft²	(%)
Floor	596		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	732	208	28
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-16.2	396	61.5	96.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-2.5	42	-7.0	55.0
Total	-18.6			

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Zone Checksums
By WSP USA INC.

A401 Unit D FCU bedroom 2

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 14; Outside Air: OADB/WB/HR: 92 / 69 / 91
CLG SPACE PEAK — Mo/Hr: 7 / 11; OADB: 81
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	798	0	798	20	1,280	41	Glass Solar	0	0	0.00
Glass/Door Cond	243	0	243	6	60	2	Glass/Door Cond	-1,305	-1,305	31.28
Wall Cond	416	0	416	11	540	17	Wall Cond	-926	-926	22.21
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	83		83	2	20	1	Infiltration	-221	-221	5.30
Sub Total ==>	1,541	0	1,541	39	1,899	60	*Sub Total ==>*	-2,452	-2,452	58.79
Internal Loads							**Internal Loads**			
Lights	460	115	575	15	460	15	Lights	0	0	0.00
People	900	0	900	23	500	16	People	0	0	0.00
Misc	288	0	288	7	288	9	Misc	0	0	0.00
Sub Total ==>	1,648	115	1,763	45	1,248	40	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	649	16	0	0	**Ventilation Load**	0	-335	8.03
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-14	-14	0			**OA Preheat Diff.**		-1,384	33.18
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	3,188	102	3,938	100.00	3,147	100.00	***Grand Total ==>***	-2,452	-4,172	100.00

TEMPERATURES	Cooling	Heating
SADB	59.1	81.6
Ra Plenum	74.0	70.0
Return	74.5	70.0
Ret/OA	76.4	68.4
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	224	224
Terminal	224	224
Main Fan	224	224
Sec Fan	0	0
Nom Vent	24	24
AHU Vent	24	24
Infil	3	3
MinStop/Rh	0	0
Return	227	227
Exhaust	27	27
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	10.5	10.5
cfm/ft²	0.66	0.66
cfm/ton	592.81	
ft²/ton	892.89	
Btu/hr·ft²	13.44	-17.03
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.4	4.5	3.3	224	76.4	62.2	75.7	59.1	55.0	69.2
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	24	83.3	65.4	82.1	83.3	65.4	82.1
Total	0.4	4.5								

AREAS	Gross Total	Glass ft²	(%)
Floor	337		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	228	40	18
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-4.4	224	65.1	81.6
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.4	24	-7.0	55.0
Total	-5.7			

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Zone Checksums
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A401 Unit D FCU bedroom 3

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 15; Outside Air: OADB/WB/HR: 93 / 70 / 94
CLG SPACE PEAK — Mo/Hr: 7 / 13; OADB: 90
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	713	0	713	15	922	26	Glass Solar	0	0	0.00
Glass/Door Cond	268	0	268	6	195	6	Glass/Door Cond	-1,305	-1,305	23.51
Wall Cond	1,163	0	1,163	25	1,088	31	Wall Cond	-2,346	-2,346	42.26
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	89		89	2	44	1	Infiltration	-216	-216	3.90
Sub Total ==>	2,233	0	2,233	48	2,250	65	*Sub Total ==>*	-3,867	-3,867	69.67
Internal Loads							**Internal Loads**			
Lights	451	113	563	12	451	13	Lights	0	0	0.00
People	900	0	900	19	500	14	People	0	0	0.00
Misc	282	0	282	6	282	8	Misc	0	0	0.00
Sub Total ==>	1,632	113	1,745	37	1,232	35	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	694	15	0	0	**Ventilation Load**	0	-328	5.91
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-13	-13	0			**OA Preheat Diff.**		-1,356	24.42
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	3,865	100	4,658	100.00	3,482	100.00	***Grand Total ==>***	-3,867	-5,551	100.00

TEMPERATURES	Cooling	Heating
SADB	57.7	88.1
Ra Plenum	74.0	70.0
Return	74.5	70.0
Ret/OA	76.4	68.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	226	226
Terminal	226	226
Main Fan	226	226
Sec Fan	0	0
Nom Vent	23	23
AHU Vent	23	23
Infil	3	3
MinStop/Rh	0	0
Return	229	229
Exhaust	26	26
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	10.2	10.2
cfm/ft²	0.69	0.69
cfm/ton	506.50	
ft²/ton	739.24	
Btu/hr·ft²	16.23	-23.97
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.5	5.4	4.0	226	76.4	62.2	75.9	57.7	53.7	66.0
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	23	83.3	65.4	82.1	83.3	65.4	82.1
Total	0.5	5.4								

AREAS	Gross Total	Glass ft²	(%)
Floor	330		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	516	40	8
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-6.6	226	63.6	88.1
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.4	23	-7.0	55.0
Total	-7.9			

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Zone Checksums
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A401 Unit D FCU living room

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 8 / 15; Outside Air: OADB/WB/HR: 90 / 69 / 92
CLG SPACE PEAK — Mo/Hr: 8 / 16; OADB: 89
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	5,907	0	5,907	35	6,148	47	Glass Solar	0	0	0.00
Glass/Door Cond	1,739	0	1,739	10	1,750	13	Glass/Door Cond	-10,439	-10,439	53.55
Wall Cond	796	0	796	5	787	6	Wall Cond	-1,794	-1,794	9.20
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	297		297	2	174	1	Infiltration	-827	-827	4.24
Sub Total ==>	8,739	0	8,739	52	8,858	67	*Sub Total ==>*	-13,060	-13,060	67.00
Internal Loads							**Internal Loads**			
Lights	1,722	430	2,152	13	1,722	13	Lights	0	0	0.00
People	2,700	0	2,700	16	1,500	11	People	0	0	0.00
Misc	1,076	0	1,076	6	1,076	8	Misc	0	0	0.00
Sub Total ==>	5,497	430	5,928	35	4,297	33	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	2,307	14	0	0	**Ventilation Load**	0	-1,253	6.43
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-48	-48	0			**OA Preheat Diff.**		-5,180	26.57
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	14,236	382	16,926	100.00	13,156	100.00	***Grand Total ==>***	-13,060	-19,493	100.00

TEMPERATURES	Cooling	Heating
SADB	58.2	85.7
Ra Plenum	74.0	70.0
Return	74.5	70.0
Ret/OA	76.1	68.5
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	880	880
Terminal	880	880
Main Fan	880	880
Sec Fan	0	0
Nom Vent	88	88
AHU Vent	88	88
Infil	11	11
MinStop/Rh	0	0
Return	892	892
Exhaust	100	100
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	10.0	10.0
cfm/ft²	0.70	0.70
cfm/ton	542.82	
ft²/ton	777.41	
Btu/hr·ft²	15.44	-21.84
No. People	6	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	1.6	19.5	14.6	880	76.1	62.1	75.7	58.2	54.1	67.1
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	88	83.3	65.4	82.1	83.3	65.4	82.1
Total	1.6	19.5								

AREAS	Gross Total	Glass ft²	(%)
Floor	1,261		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	684	320	47
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-22.4	880	64.2	85.7
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-5.2	88	-7.0	55.0
Total	-27.5			

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Zone Checksums
By WSP USA INC.

B604 unit E FCU 1 living room

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 17; Outside Air: OADB/WB/HR: 90 / 68 / 85
CLG SPACE PEAK — Mo/Hr: 7 / 18; OADB: 87
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	1,292	0	1,292	5	1,277	6	Roof Cond	-1,547	-1,547	5.29
Glass Solar	9,013	0	9,013	38	9,942	49	Glass Solar	0	0	0.00
Glass/Door Cond	3,223	0	3,223	14	2,736	14	Glass/Door Cond	-16,898	-16,898	57.74
Wall Cond	1,329	0	1,329	6	1,364	7	Wall Cond	-2,385	-2,385	8.15
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	-18		-18	0	-10.24	0	Floor	-903	-903	3.09
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	256		256	1	155	1	Infiltration	-858	-858	2.93
Sub Total ==>	15,095	0	15,095	64	15,463	77	*Sub Total ==>*	-22,592	-22,592	77.20
Internal Loads							**Internal Loads**			
Lights	1,786	446	2,232	9	1,786	9	Lights	0	0	0.00
People	3,150	0	3,150	13	1,750	9	People	0	0	0.00
Misc	1,116	0	1,116	5	1,116	6	Misc	0	0	0.00
Sub Total ==>	6,052	446	6,498	28	4,652	23	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	1,991	8	0	0	**Ventilation Load**	0	-1,300	4.44
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-31	-31	0			**OA Preheat Diff.**		-5,373	18.36
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	21,146	416	23,554	100.00	20,115	100.00	***Grand Total ==>***	-22,592	-29,265	100.00

TEMPERATURES	Cooling	Heating
SADB	59.7	86.0
Ra Plenum	74.0	70.0
Return	74.3	70.0
Ret/OA	75.3	69.1
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	1,491	1,491
Terminal	1,491	1,491
Main Fan	1,491	1,491
Sec Fan	0	0
Nom Vent	92	92
AHU Vent	92	92
Infil	12	12
MinStop/Rh	0	0
Return	1,503	1,503
Exhaust	103	103
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	6.1	6.1
cfm/ft²	1.14	1.14
cfm/ton	657.91	
ft²/ton	577.26	
Btu/hr·ft²	20.79	-32.65
No. People	7	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	2.3	27.1	21.5	1,491	75.3	61.6	74.6	59.7	55.1	68.8
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.1	0.1	92	93.2	70.2	93.8	92.0	69.9	93.8
Total	2.3	27.2								

AREAS	Gross Total	Glass ft²	(%)
Floor	1,308		
Part	0		
Int Door	1		
ExFlr	230		
Roof	628	0	0
Wall	1,002	518	52
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-37.3	1,491	64.9	86.0
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-5.4	92	-7.0	55.0
Total	-42.7			

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Zone Checksums
By WSP USA INC.

B604 unit E FCU 4 bedroom 2

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 14; Outside Air: OADB/WB/HR: 92 / 69 / 91
CLG SPACE PEAK — Mo/Hr: 7 / 11; OADB: 81
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	1,879	0	1,879	34	2,778	60	Glass Solar	0	0	0.00
Glass/Door Cond	719	0	719	13	176	4	Glass/Door Cond	-3,849	-3,849	58.02
Wall Cond	280	0	280	5	322	7	Wall Cond	-690	-690	10.40
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	90		90	2	22	0	Infiltration	-239	-239	3.60
Sub Total ==>	2,968	0	2,968	54	3,297	72	*Sub Total ==>*	-4,778	-4,778	72.01
Internal Loads							**Internal Loads**			
Lights	497	124	621	11	497	11	Lights	0	0	0.00
People	900	0	900	16	500	11	People	0	0	0.00
Misc	311	0	311	6	311	7	Misc	0	0	0.00
Sub Total ==>	1,708	124	1,832	33	1,308	28	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	694	13	0	0	**Ventilation Load**	0	-362	5.45
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-10	-10	0			**OA Preheat Diff.**		-1,495	22.54
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	4,675	114	5,484	100.00	4,605	100.00	***Grand Total ==>***	-4,778	-6,635	100.00

TEMPERATURES	Cooling	Heating
SADB	60.2	84.3
Ra Plenum	74.0	70.0
Return	74.4	70.0
Ret/OA	75.6	68.9
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	353	353
Terminal	353	353
Main Fan	353	353
Sec Fan	0	0
Nom Vent	25	25
AHU Vent	25	25
Infil	3	3
MinStop/Rh	0	0
Return	356	356
Exhaust	29	29
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	7.2	7.2
cfm/ft²	0.97	0.97
cfm/ton	668.25	
ft²/ton	689.46	
Btu/hr·ft²	17.40	-26.17
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.5	6.3	4.8	353	75.6	61.8	75.1	60.2	55.5	69.7
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	25	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.5	6.3								

AREAS	Gross Total	Glass ft²	(%)
Floor	364		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	258	118	46
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-8.0	353	65.1	84.3
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.5	25	-7.0	55.0
Total	-9.5			

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Zone Checksums
By WSP USA INC.

B604 unit E FCU 4 bedroom 2

COOLING COIL PEAK — Peaked at Time: Mo/Hr: 7 / 14; Outside Air: OADB/WB/HR: 92 / 69 / 91
CLG SPACE PEAK — Mo/Hr: 7 / 11; OADB: 81
HEATING COIL PEAK — Mo/Hr: Heating Design; OADB: -7

	COOLING COIL PEAK				CLG SPACE PEAK		HEATING COIL PEAK			
	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	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads							**Envelope Loads**			
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00
Glass Solar	1,879	0	1,879	34	2,778	60	Glass Solar	0	0	0.00
Glass/Door Cond	719	0	719	13	176	4	Glass/Door Cond	-3,849	-3,849	58.02
Wall Cond	280	0	280	5	322	7	Wall Cond	-690	-690	10.40
Partition/Door	0		0	0	0	0	Partition/Door	0	0	0.00
Floor	0		0	0	0.00	0	Floor	0	0	0.00
Adjacent Floor	0.00	0.00	0.00	0.00	0.00	0.00	Adjacent Floor	0.00	0.00	0.00
Infiltration	90		90	2	22	0	Infiltration	-239	-239	3.60
Sub Total ==>	2,968	0	2,968	54	3,297	72	*Sub Total ==>*	-4,778	-4,778	72.01
Internal Loads							**Internal Loads**			
Lights	497	124	621	11	497	11	Lights	0	0	0.00
People	900	0	900	16	500	11	People	0	0	0.00
Misc	311	0	311	6	311	7	Misc	0	0	0.00
Sub Total ==>	1,708	124	1,832	33	1,308	28	*Sub Total ==>*	0	0	0.00
Ceiling Load	0	0	0	0	0	0	**Ceiling Load**	0	0	0.00
Ventilation Load	0	0	694	13	0	0	**Ventilation Load**	0	-362	5.45
Adj Air Trans Heat	0		0	0	0	0	**Adj Air Trans Heat**	0	0	0
Dehumid. Ov Sizing			0	0			**Ov/Undr Sizing**	0	0	0.00
Ov/Undr Sizing	0		0	0	0	0	**Exhaust Heat**		0	0.00
Exhaust Heat		-10	-10	0			**OA Preheat Diff.**		-1,495	22.54
Sup. Fan Heat			0	0			**RA Preheat Diff.**		0	0.00
Ret. Fan Heat		0	0	0			**Additional Reheat**		0	0.00
Duct Heat Pkup		0	0	0			**System Plenum Heat**		0	0.00
Underflr Sup Ht Pkup			0	0			**Underflr Sup Ht Pkup**		0	0.00
Supply Air Leakage		0	0	0			**Supply Air Leakage**		0	0.00
Grand Total ==>	4,675	114	5,484	100.00	4,605	100.00	***Grand Total ==>***	-4,778	-6,635	100.00

TEMPERATURES	Cooling	Heating
SADB	60.2	84.3
Ra Plenum	74.0	70.0
Return	74.4	70.0
Ret/OA	75.6	68.9
Fn MtrTD	0.0	0.0
Fn BldTD	0.0	0.0
Fn Frict	0.0	0.0

AIRFLOWS	Cooling	Heating
Diffuser	353	353
Terminal	353	353
Main Fan	353	353
Sec Fan	0	0
Nom Vent	25	25
AHU Vent	25	25
Infil	3	3
MinStop/Rh	0	0
Return	356	356
Exhaust	29	29
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS	Cooling	Heating
% OA	7.2	7.2
cfm/ft²	0.97	0.97
cfm/ton	668.25	
ft²/ton	689.46	
Btu/hr·ft²	17.40	-26.17
No. People	2	

COOLING COIL SELECTION	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	0.5	6.3	4.8	353	75.6	61.8	75.1	60.2	55.5	69.7
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Opt Vent	0.0	0.0	0.0	25	93.2	70.2	93.8	92.0	69.9	93.8
Total	0.5	6.3								

AREAS	Gross Total	Glass ft²	(%)
Floor	364		
Part	0		
Int Door	1		
ExFlr	0		
Roof	0	0	0
Wall	258	118	46
Ext Door	0	0	0

HEATING COIL SELECTION	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-8.0	353	65.1	84.3
Aux Htg	0.0	0	0.0	0.0
Preheat	0.0	0	0.0	0.0
Humidif	0.0	0	0.0	0.0
Opt Vent	-1.5	25	-7.0	55.0
Total	-9.5			

Project Name:
Dataset Name: SOMMET220519.TRC
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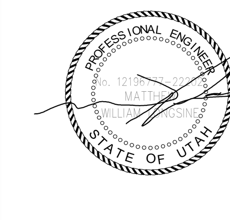

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principal architect ______
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drawn by ______
checked by ______
job no.
date 5/17/2024

revisions:

no. date by

IFC Set 2 of 3
5/17/2024

HVAC LOAD CALCULATION

M0.09