SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	PEC	OPLE RA	AIR CA TIO (KB	OOLII PACIT	TY SE		HEATING CAPACITY (KBTU/HR)	COOLIN EI (BTU/BTU	R EI ) (BTU/BTU	R SUPP-HE.	AT R)	
PVVT	1.000	20477.3		0. 1.	000 1	34.00	00	0.677	-320.000	0.25	2 0.16	5 0.0	00	
FAN	CAPACITY	DIVERSITY FACTOR					TOTAL EFF			AN	MAX F FAN RAT			
TYPE	(CFM )	(FRAC)	(KV	(F)	(IN-WAT	ER)	(FRAC)	(FRAC)	PLACEME	NT CONT	ROL (FRA	C) (FRA	C)	
SUPPLY	5500.	1.00	2.95	59 1.66		0.0	0.00	0.00	DRAW-TH	RU CONST	ANT 1.	00 0.	30	
			SUPPLY	EXHAUST		MIN	NIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN		FLOW	AIR FLOW	CAPACITY	SENSIBL	E RATE	CAPACITY	RATE	ZONE
NAME			(CFM )	(CFM )	(KW)	( I	FRAC)	(CFM )	(KBTU/HR)	(FRAC	) (KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L5 W (G	.W12) COR		193.	0.	0.000		L.000	193.	0.00	0.0	0 1.38	0.00	-9.22	1.
Zn L6 C (G			216.	0.	0.000		L.000	216.		0.0				
Zn L7 C (G	G.C14) COR		215.	0.	0.000	1	L.000	215.	0.00	0.0	0 1.54	0.00	-10.27	1.
Zn L15 C (	G.C10) COR		384.	0.	0.000	-	L.000	384.	0.00	0.0	0 2.75	0.00	-18.31	1.
Zn L17 C (	M.C25) COR		167.	0.	0.000	1	L.000	167.	0.00	0.0	0 1.20	0.00	-7.98	10.
Zn L28 C (	G.C7) COR		184.	0.	0.000		L.000	184.	0.00	0.0	0 1.32	0.00	-8.76	1.
	G.ENE2) CC	R	491.	0.	0.000		L.000	491.		0.0	0 3.52	0.00		
Zn L5 C (G			284.	0.	0.000		L.000	284.		0.0				
Zn L8 C (M	1.C29) COR		215.	0.	0.000		L.000	215.	0.00	0.0	0 1.54	0.00	-10.27	6.
Zn L14 C (	T.C44) COR		231.	0.	0.000	1	L.000	231.	0.00	0.0	0 1.65	0.00	-11.02	1.
	G.C10) COR		167. 171.	0. 0.	0.000		L.000 L.000	167. 171.		0.0				

		FLOOR				OOLING		HEATING	COOLING	HEATING			
SYSTEM	ALTITUDE	AREA		MAX			SENSIBLE	CAPACITY	EIR	EIR			
TYPE	FACTOR	(SQFT )	PEO	PLE R	ATIO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HI	₹)	
JVT	1.000	2956.7		0. 1	.000	73.356	0.634	-166.875	0.243	0.000	0.00	00	
		DIVERSITY	POWE	R FA	N STA	TIC TOTA	AL MECH			MAX FA	N MIN FA	AN	
FAN	CAPACITY	FACTOR	DEMAN	D DELTA-	T PRESS	URE E	FF EFF	FA	AN F	AN RATI	O RAT	IO	
TYPE	(CFM )	(FRAC)	(KW	) (F	) (IN-WAT	ER) (FRA	C) (FRAC)	PLACEMEN	NT CONTRO	OL (FRAC	(FRAC	2)	
SUPPLY	1650.	1.00	0.64	7 1.2	1	0.0	0.00	DRAW-TH	RU CONSTAN	NT 1.0	0 0.3	30	
		:	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	F	EXTRACTION	HEATING	ADDITION	.J
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	z ZC
NAME			(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	) MU
F-L4 DUMM	IY ZN		35.	0.	0.000	1.000	35.	0.00	0.00	0.37	0.00	-1.49	9
n P1 C (B	.C9) COR		140.	0.	0.000	1.000	140.	0.00	0.00	3.48	0.00	-6.04	4
n P2 C (U	B.C14) COF	!	194.	0.	0.000	1.000	194.	0.00	0.00	4.82	0.00	-8.39	9
n L1 C (G	.C8) COR		220.	0.	0.000	1.000	220.	0.00	0.00	5.47	0.00	-9.52	2
1 L1 C (G	.C10) COR		90.	0.	0.000	1.000	90.	0.00	0.00	2.25	0.00	-3.91	1
1 L1 S (G	.S16) COR		152.	0.	0.000	1.000	152.	0.00	0.00	3.78	0.00	-6.57	7
n P3 C (B	B.C5) COR		194.	0.	0.000	1.000	194.	0.00	0.00	4.82	0.00	-8.38	3
n P4 C (B	.C4) COR		63.	0.	0.000	1.000	63.	0.00	0.00	1.57	0.00	-3.39	9
											-0.67	(BASEBOAR	RDS
1 L2 C (G	.C2) COR		173.	0.	0.000	1.000	173.	0.00	0.00	4.30	0.00	-7.48	3
n L3 C (G	.C2) COR		179.	0.	0.000	1.000	179.	0.00	0.00	4.45	0.00	-7.73	3
1 0 /0	.C2) COR		209.	0.	0.000	1.000	209.	0.00	0.00	5.20	0.00	-9.04	4

REPORT- SV	-A System	Design Para	meters for	L1 Ret	ail Split	System	N		WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	2831.6	47.	0.0	00 40	.205	0.784	-35.630	0.244	0.275	-12.834	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F.	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	1588.	1.00	2.747	5.35	0.	0 0.5	0 0.00	DRAW-TH	RU CYCLIN	g 1.00	0.30	
		S		HAUST		MINIMUM	OUTSIDE			XTRACTION		ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		( (	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L1 N (G.NNW2) RTL 1588. 0. 0.000 0.001 0. 0.00 0.00 34.29 0.00 -15.40 1.

REPORT- SV-A System Design Parameters for L1 Sys1 (PVVT) (G.N14)

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPACI	TY SEI	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	2636.9	85.	0.5	02 48.0	00	0.642	-51.000	0.171	0.172	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH	[		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	· FA	N FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMEN	T CONTROL	L (FRAC)	(FRAC)	
SUPPLY	1270.	1.00	0.240	0.58	0.0	0.50	0.00	DRAW-THR	U SPEEI	1.00	0.30	

	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	E	EXTRACTION	HEATING	ADDITION	
ZONE	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L1 C (G.C4) LOB	123.	0.	0.000	1.000	63.	0.00	0.00	2.33	0.00	-4.42	1.
Zn L1 N (G.N14) LOB	1137.	0.	0.000	1.000	576.	0.00	0.00	21.57	0.00	-40.95	1.
Zn L1 C (G.C5) RR	10.	0.	0.000	1.000	0.	0.00	0.00	0.35	0.00	-0.44	1.

REPORT- SV	REPORT- SV-A System Design Parameters for				Split Syste	em S		WEATH	ER FILE- S	EATTLE BOEING	FI WA
		FLOOR		OUTSIDE	COOLING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	AIR	CAPACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	

PVVT	1.000	5434.4	91.	0.0	000 84.0	40	0.782	-74.169	0.241	0.273	-10.059	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F)	STATIC PRESSURE (IN-WATER)	TOTAL EFF (FRAC)	MECH EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)	
SUPPLY	3305.	1.00	5.718	5.35	0.0	0.00	0.00	DRAW-THRU	CONSTANT	1.00	0.30	
		SI	MI	NIMUM	OUTSIDE	COOLING	EXT	RACTION	HEATING AD	DITION		

	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	E	EXTRACTION	HEATING	ADDITION	
ZONE	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZON	Ε
NAME	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR) MUL	Т
Zn L1 E (G.ENE18) RTL	2970.	0.	0.000	0.001	0.	0.00	0.00	64.14	0.00	-27.70 1	
									-27.70	(BASEBOARDS)	
Zn L2 N (G.NE9) RTL	136.	0.	0.000	1.000	0.	0.00	0.00	2.93	0.00	-16.83 1	
									-12.00	(BASEBOARDS)	
Zn L2 S (G.SE10) RTL	200.	0.	0.000	1.000	0.	0.00	0.00	4.32	0.00	-19.13 1	
									-12.00	(BASEBOARDS)	

REPORT- SV-A System Design Parameters for L3 Ops Office Elec Heat WEATHER FILE- SEATTLE BOEING FI WA

	=	_		-								
		FLOOR		OUTS		OLING		HEATING	COOLING	HEATING		
SYSTEM	ALTITUDE	AREA	MA	X A	AIR CAPA	ACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA'	Γ
TYPE	FACTOR	(SQFT )	PEOPL	E RAT	rio (KBT	J/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PTAC	1.000	812.1	3	0.0	000	0.000	0.000	0.000	0.173	0.000	0.00	0
		DIVERSITY	POWER	FAN	STAT	IC TOTA	AL MECH			MAX FA	N MIN FAI	Ŋ
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUE	RE E	F EFF	FA	AN FA	N RATI	O RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	R) (FRAC	(FRAC)	PLACEMEN	NT CONTRO	L (FRAC	) (FRAC	)
SUPPLY	44.	0.00	0.000	0.93	0 .	.0 0.0	0.00	BLOW-THF	RU CYCLIN	G 0.0	0.0	0
		S	UPPLY E	XHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW		SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)		(KBTU/HR)				(KBTU/HR) MULT
Zn L3 S (G	.S9) OFF		34.	0.	0.010	1.000	0.	1.56	0.64	1.45	-1.74 -18.00	-13.19 1. (BASEBOARDS)
Zn L3 C (G	3.C10) STO		10.	0.	0.003	1.000	0.	0.39	0.67	0.36	-1.00	-0.68 1.

233.

0.

0.000

Zn L4 C (G.C6) RR

1.000 0. 0.00 0.00 4.44

0.00 -8.25 1.

REPORT- SV	-A System	Design Param	eters for	L4 Sys	1 (PVVT)	(G.C6)			WEATH	ER FILE- SE	ATTLE BOEIN	NG FI WA
		FLOOR		OUTSI	DE COC	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	562.9	4.	0.0	00 6	.000	0.796	-6.700	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	AL MECH	Ī		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUF	E EF	FF EFF	F.	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	(FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	233.	1.00	0.044	0.58	0.	0 0.0	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
		SU	JPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING A	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( C	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (F	KBTU/HR) MULT

REPORT- SV	ATTLE BOEI	NG FI WA										
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1197.3	8.	0.0	00 36	.000	0.836	-42.000	0.296	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	1316.	1.00	0.249	0.58	0.	0 0.5	0.00	DRAW-TH	RU CYCLING	G 1.00	0.30	
		SI	JPPLY EXI	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING .	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		((	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L4 W (G.W8) OFF 1316. 0. 0.000 1.000 0. 0.00 0.00 28.15 0.00 -46.62 1.

REPORT- SV-A System Design Paramet	ers for L4		/VT) (G.S9)		WEATHER	FILE- S	EATTLE	BOEING	WA
FLOOR	JO	UTSIDE	COOLING	 HEATING CO	OOLING	HEATING	HEAT	PUMP	 

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE 17.	RAT	IR CAPACI	TY SE	ENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	r )
PVVT	1.000	2458.5	17.	0.0	00 66.0	100	0.908	-72.000	0.294	0.172	0.000	J
		DIVERSITY	POWER	FAN	STATIC	TOTAL				MAX FAN		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF						
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMEN	IT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	1498.	1.00	0.283	0.58	0.0	0.50	0.00	DRAW-THE	U CYCLING	G 1.00	0.30	
ZONE NAME			FLOW	HAUST FLOW CFM )	FAN	NIMUM FLOW FRAC)	OUTSIDE AIR FLOW (CFM )		SENSIBLE	XTRACTION RATE (KBTU/HR) (	CAPACITY	ADDITION RATE ZONE (KBTU/HR) MULT

Zn L4 S (G.S9) OFF 1498. 0. 0.000 1.000 0. 0.00 32.06 0.00 -53.09 1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.E10) WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLI		AIR CA	OOLING PACITY TU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUM SUPP-HEA' (KBTU/HR	Г
PVVT	1.000	1197.7	8 .	. 0.0	000	33.000	0.884	-39.000	0.172	0.173	0.00	)
FAN	CAPACITY	DIVERSITY FACTOR	POWER DEMAND	FAN DELTA-T	STA'		AL MECH		AN FA	MAX FAN N RATIC		
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	857.	1.00	0.162	0.58	•	0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.3	)
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	(KBTU/HR) MULT
Zn L4 E (G	.E10) OFF		857.	0.	0.000	1.000	0.	0.00	0.00	18.35	0.00	-30.39 1.

REPORT- SV-A System Design Parameters for	L4 Sys1	(PVVT)	(G.N11)
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		FLOOR		OUTSI		OOLING		HEATING	COOLING	HEATING	HEAT PUMI	
SYSTEM	ALTITUDE	AREA	MAX	ζ P	AIR CAI	PACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	Γ
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	CIO (KB	ru/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	2234.4	16.	0.0	000	36.000	0.829	-42.000	0.172	0.173	0.000	)
		DIVERSITY	POWER	FAN	STA	FIC TOTA	AL MECH	I		MAX FAN	I MIN FAI	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EI	FF EFF	F	'AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	1188.	1.00	0.225	0.58	(	0.0 0.!	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.30	)
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	; <u> </u>	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(		CFM )	(KW)	(FRAC)	(CFM )			(KBTU/HR) (		(KBTU/HR) MULT
Zn L4 N (G	.N11) OFF		1188.	0.	0.000	1.000	0.	0.00	0.00	25.42	0.00	-42.10 1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.C12)

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		AIR CA	OOLING PACITY TU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUME SUPP-HEAT (KBTU/HR)	
PVVT	1.000	5388.9	38.	0.0	000	63.000	0.818	-69.000	0.171	0.172	0.000	)
FAN	CAPACITY	DIVERSITY FACTOR	POWER DEMAND	FAN DELTA-T	STA PRESS		AL MECH		AN FA	MAX FAN N RATIO		
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	2031.	1.00	0.384	0.58		0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	(KBTU/HR)	KBTU/HR) MULT
Zn L4 C (G	.C12) OFF		2031.	0.	0.000	1.000	0.	0.00	0.00	43.46	0.00	-71.98 1.

REFORT BY	- A Dybeem					(0.015)						
		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING	HEAT PUME	>
SYSTEM	ALTITUDE	AREA	MAX	P	AIR CAP	ACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	:
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	CIO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	3915.1	27.	0.0	000 4	8.000	0.823	-54.000	0.171	0.172	0.000	)
		DIVERSITY	POWER	FAN	STAT	IC TOTA	AL MECH	Ī		MAX FAN	MIN FAN	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE E	FF EFF	F.	AN FA	N RATIO	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	1518.	1.00	0.287	0.58	0	.0 0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L4 C (G	G.C13) OFF		1518.	0.	0.000	1.000	0.	0.00	0.00	32.49	0.00	-53.80 1.

662.

85.

0.017

Zn L5 W (G.W6) APT1

(FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR) MULT 1.000 0. 0.00 0.00 14.16 0.00 -23.46 1.

REPORT- SV	7-A System	Design Para	meters for	L5 Sys	s1 (PVVT)	(G.W6)			WEATH	IER FILE- S	EATTLE BOE	ING FI WA	
SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		AIR CAF	OOLING PACITY TU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)		AΤ	
PVVT	1.000	1411.5	3.	0.0	000 2	24.000	0.888	-27.000	0.172	0.173	0.00	00	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F)	STAT PRESSU	JRE I	FAL MECEFF EF	F F.	AN FA		O RATI	10	
SUPPLY	662.	1.00	0.125	0.58	C	0.0 0.	.50 0.0	0 DRAW-TH	RU CYCLIN	IG 1.0	0 0.3	30	
ZONE NAME			FLOW	HAUST FLOW CFM )	FAN	MINIMUM FLOW (FRAC)	V AIR FLO	W CAPACITY	SENSIBLE	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	

REPORT- SV-A System Design Parameters for	L5 Sys1 (PVVT) (G.S7)	WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI		OOLING		HEATING	COOLING	HEATING	HEAT PUMI	
SYSTEM	ALTITUDE	AREA	MAX				SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KB'	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	4144.8	8.	0.0	100 3	36.000	0.933	-39.000	0.172	0.173	0.000	)
		DIVERSITY	POWER	FAN	STAT	TIC TOTA	AL MECH			MAX FAN	MIN FAI	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EI	FF EFF	FA	AN FAI	N RATIO	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	ER) (FRAC	C) (FRAC)	PLACEMEN	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	834.	1.00	0.158	0.58	(	0.0 0.5	50 0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	(KBTU/HR)	(KBTU/HR) MULT
Zn L5 S (G	G.S7) APT3		834.	249.	0.049	1.000	0.	0.00	0.00	17.85	0.00	-29.56 1.

	FT 00P		2007 TV2	***********					
					WEATHER !		TILE BOEING		WA 
REPORT- SV-A System De:	eian Darametere for	T.5 Syc1 (D)	MT) (G ESES)		MEATHED 1	RTIR_ CR7	ATTLE BOEING	ET 1	WA

		FLOOR		OUTS	DE CO	OOLING		HEATING	COOLING	HEATING	HEAT PUME	
SYSTEM	ALTITUDE	AREA	MAX	K I	AIR CAI	PACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	i
TYPE	FACTOR	(SQFT )	PEOPLI	E RAT	rio (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1518.1	3	. 0.0	000 2	21.000	0.901	-21.000	0.172	0.173	0.000	
		DIVERSITY	POWER	FAN	STA	ric Tota	AL MECH	I		MAX FAN	MIN FAN	Ť
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE E	FF EFF	F	AN FAI	N RATIO	RATIO	1
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	578.	1.00	0.109	0.58	(	0.0 0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L5 E (G	G.ESE8) APT	1:	578.	91.	0.018	1.000	0.	0.00	0.00	12.36	0.00	-20.48 1.

REPORT- SV-A System Design Parameters for L5 Sys1 (PVVT) (G.ENE9)

REPORT- SV	-A System	Design Param	meters for	. пэ зая	I (PVVI	) (G.ENE	9) 		WEAIH	EK FILE- SI	SAIILE BOE	ING FI WA	
SYSTEM	ALTITUDE	FLOOR AREA	MAΣ	OUTSI		OOLING PACITY	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUM		
TYPE	FACTOR	(SQFT )	PEOPLE			TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR		
PVVT	1.000	1445.8	3.	. 0.0	00	18.000	0.958	-18.000	0.173	0.173	0.00	0	
		DIVERSITY	POWER	FAN	STA	TIC TO	TAL MECH	I		MAX FAI	N MIN FA	N	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	URE	EFF EFF	F	'AN FA	N RATIO	) RATI	0	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FR	AC) (FRAC)	PLACEME	NT CONTRO	L (FRAC	) (FRAC	)	
SUPPLY	340.	1.00	0.064	0.58		0.0 0	.50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.3	0	
		SU	JPPLY EX	KHAUST		MINIMU	M OUTSIDE	COOLING	; E	XTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLO	W AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME		( (	CFM ) (	(CFM )	(KW)	(FRAC	) (CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L5 E (G	.ENE9) APT	1	340.	87.	0.017	1.00	0 0.	0.00	0.00	7.28	0.00	-12.06	1.

REPORT- SV-A System Design Parameters for L5 S	Sys1 (PVVT)	(G.W10)
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REPORT- SV	-A System	Design Para	meters for	L5 Sys1	L (PVVT)	(G.W10)			WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSII	DE COOI	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	AI	IR CAPAC	CITY SI	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATI	IO (KBTU,	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1353.9	3.	0.00	00 21	.000	0.865	-24.000	0.172	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIO	C TOTAL	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURI	E EFI	F EFF	FA	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F) (	(IN-WATER	) (FRAC	) (FRAC)	PLACEMEN	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	656.	1.00	0.124	0.58	0.0	0.50	0.00	DRAW-TH	RU CYCLING	J 1.00	0.30	
		S	JPPLY EXH	IAUST	1	MUMINIM	OUTSIDE	COOLING	E	KTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( (	CFM ) (C	PM )	(KW)	(FRAC)	(CFM)	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L5 W (G.W10) APT1 656. 81. 0.016 1.000 0. 0.00 14.04 0.00 -23.26 1.

REPORT- SV-A System Design Parameters for L5 Sys1 (PVVT) (G.N11)

	-	_		-								
SYSTEM	ALTITUDE	FLOOR AREA	MAΣ	OUTS		OOLING PACITY S	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMI	
TYPE	FACTOR	(SQFT )	PEOPLE			U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	
PVVT	1.000	3993.7	7.	. 0.0	000 2	27.000	0.844	-30.000	0.172	0.173	0.000	)
		DIVERSITY	POWER	FAN	STAT	IC TOTA	AL MECH	I		MAX FAI	N MIN FAI	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EI	FF EFF	F	AN FA	N RATIO	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	CR) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC	(FRAC	
SUPPLY	837.	1.00	0.158	0.58	C	0.0 0.9	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.30	)
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	KBTU/HR) MULT
Zn L5 N (G	G.N11) APT3	3	837.	240.	0.047	1.000	0.	0.00	0.00	17.91	0.00	-29.66 1.

ZONE

NAME

Zn L6 W (G.WSW5) APT1

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.WSW5)

SUPPLY EXHAUST

FLOW

(CFM )

58.

FLOW

(CFM)

438.

FAN

0.011

MINIMUM OUTSIDE COOLING EXTRACTION HEATING ADDITION FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY RATE

(FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR) MULT

0.00 9.37

RATE ZONE

0.00 -15.53 1.

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		AIR CAPACI	TY SEI	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	956.7	2.	0.0	000 15.0	00	0.877	-15.000	0.173	0.173	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F)	STATIC PRESSURE (IN-WATER)	TOTAL EFF (FRAC)	MECH EFF (FRAC)					
SUPPLY	438.	1.00	0.083	0.58	0.0	0.50	0.00					

1.000

0. 0.00

REPORT- SV	7-A System	Design Parame	eters for	L6 Sys	1 (PVVT)	(G.S6)			WEATH	ER FILE- SE	ATTLE BOEIN	IG FI WA
SYSTEM	ALTITUDE	FLOOR AREA	MAX	OUTSII A:	DE COO:	LING CITY S	ENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMP	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	2069.4	4.	0.00	00 15	.000	0.855	-21.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	523.	1.00	0.099	0.58	0.	0 0.5	0 0.00	DRAW-TH	RU CYCLING	g 1.00	0.30	
				HAUST		MINIMUM	OUTSIDE			XTRACTION		ADDITION
ZONE NAME			FLOW FM ) ((	FLOW CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	(KBTU/HR)			CAPACITY KBTU/HR) (K	RATE ZONE BTU/HR) MULT

Zn L6 S (G.S6) APT3 523. 124. 0.024 1.000 0. 0.00 11.18 0.00 -18.52 1.

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLI		AIR CA	OOLING PACITY TU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMI SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1233.6	2.	. 0.0	000	12.000	0.908	-15.000	0.173	0.173	0.000	)
EAN	CADACTEV	DIVERSITY	POWER	FAN	STA				A A T T T T T T T T T T T T T T T T T T	MAX FAN		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS		FF EFF		AN FA			
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	314.	1.00	0.059	0.58		0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	(KBTU/HR)	KBTU/HR) MULT
Zn L6 E (G	.ESE7) APT	1	314.	74.	0.015	1.000	0.	0.00	0.00	6.72	0.00	-11.12 1.

ZONE

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.W8)

SUPPLY EXHAUST

FLOW

FLOW

FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY

RATE ZONE

WEATHER FILE- SEATTLE BOEING FI WA

EXTRACTION HEATING ADDITION

\_\_\_\_\_ FLOOR MAX OUTSIDE COOLING HEATING COOLING HEATING HEAT PUMP AIR CAPACITY SENSIBLE CAPACITY
RATIO (KBTU/HR) (SHR) (KBTU/HR) EIR SYSTEM ALTITUDE AREA EIR SUPP-HEAT ALTITUDE AREA FACTOR (SQFT) PEOPLE (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) TYPE PVVT 1.000 640.8 0.000 9.000 0.870 -9.000 0.173 0.173 0.000 POWER FAN STATIC TOTAL MECH
DEMAND DELTA-T PRESSURE EFF EFF FAN FAN DIVERSITY MAX FAN MIN FAN FAN CAPACITY FACTOR RATIO RATIO TYPE (CFM ) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL SUPPLY 271. 1.00 0.051 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30

NAME (CFM ) (CFM ) (KW) (FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) MULT

FAN

MINIMUM OUTSIDE COOLING

Zn L6 W (G.W8) APT1 271. 39. 0.008 1.000 0. 0.00 0.00 5.79 0.00 -9.59 1.

REPORT- SV	7-A System	Design Para	meters for	L6 Sys	1 (PVVT)	(G.NW9)			WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSI	DE COC	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	925.4	2.	0.0	00 9	.000	0.815	-12.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F.	AN FA	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	384.	1.00	0.073	0.58	0.	0 0.5	0 0.00	DRAW-TH	RU CYCLIN	g 1.00	0.30	
		SI	JPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		((	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L6 N (G.NW9) APT1 384. 56. 0.011 1.000 0. 0.00 0.00 6.88 0.00 -13.61 1.

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.NE10)

	•	_		-								
SYSTEM	ALTITUDE	FLOOR AREA	MAX	OUTSI		DOLING PACITY S	GENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUME	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	CIO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	749.0	1.	0.0	000	6.000	0.867	-6.700	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STA	ric tot <i>i</i>	AL MECH	I		MAX FAN	N MIN FAN	ī
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSI	JRE EF	F EFF	· F	AN FA	N RATIC	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	164.	1.00	0.031	0.58		0.0 0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L6 N (G	.NE10) APT	1	164.	45.	0.009	1.000	0.	0.00	0.00	3.51	0.00	-5.81 1.

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.NW11)

													-
		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING	HEAT PUM	>	
SYSTEM	ALTITUDE	AREA	MAX	ζ Z	AIR CAP	ACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT		
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	CIO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)	
PVVT	1.000	711.4	1.	0.0	000	6.000	0.853	-6.700	0.173	0.173	0.000	)	
		DIVERSITY	POWER	FAN	STAT	CIC TOTA	AL MECH			MAX FAI	N MIN FAI	1	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EF	FF EFF	F/	AN FA	N RATIO	) RATIO	)	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	CR) (FRAC	(FRAC)	PLACEMEN	NT CONTRO	L (FRAC	) (FRAC	)	
SUPPLY	183.	1.00	0.035	0.58	0	0.0 0.5	0.00	DRAW-THE	RU CYCLIN	G 1.00	0.30	)	
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZO	ONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	KBTU/HR) MU	ULT
Zn L6 N (G	G.NW11) APT	1	183.	43.	0.008	1.000	0.	0.00	0.00	3.92	0.00	-6.49	1.

ZONE

NAME

Zn L6 N (G.NE12) APT1

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.NE12)

SUPPLY EXHAUST

FLOW

(CFM )

76.

FLOW

(CFM)

253.

FAN

0.015

MINIMUM OUTSIDE COOLING EXTRACTION HEATING ADDITION FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY RATE

(FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR) MULT

0.00 5.41

RATE ZONE

0.00 -8.95 1.

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPACI	TY SEI	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)
PVVT	1.000	1265.9	2.	0.0	00 9.0	00	0.859	-9.000	0.173	0.173	0.000
EAN	CADACIEV	DIVERSITY	POWER	FAN	STATIC	TOTAL			N 527	MAX FAN	
FAN TYPE	CAPACITY (CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)				RATIO (FRAC)
SUPPLY	253.	1.00	0.048	0.58	0.0	0.50	0.00	DRAW-THI	RU CYCLING	g 1.00	0.30

1.000 0. 0.00

NAME

Zn L6 E (G.ESE13) APT1

(CFM )

41.

(CFM)

111.

FAN

0.008

(FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR) MULT

0.00 2.37

0.00 -3.92 1.

REPORT- SV	7-A System	Design Para	meters for	L6 Sys	1 (PVVT) (G	.ESE13	)		WEATHE	ER FILE- SE	ATTLE BOE	NG FI WA
		FLOOR		OUTSI	DE COOLI	NG		HEATING	COOLING	HEATING	HEAT PUME	)
SYSTEM	ALTITUDE	AREA	MAX	P	IR CAPACI	TY SI	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	:
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KBTU/H	R)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	679.6	1.	0.0	000 6.0	00	0.946	-6.700	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STATIC	TOTAI	L MECH			MAX FAN	MIN FAN	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	F EFF	F	AN FAI	N RATIO	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEME	NT CONTROL	(FRAC)	(FRAC)	
SUPPLY	111.	1.00	0.021	0.58	0.0	0.50	0.00	DRAW-THI	RU CYCLING	1.00	0.30	)
		S		HAUST		NIMUM	OUTSIDE			TRACTION		ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE

1.000

0. 0.00

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.WSW5)

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIF RATIO	R CAPACI	ry sei	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	956.7	2.	0.000	15.00	00	0.875	-15.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTAL				MAX FAN		
FAN TYPE	CAPACITY (CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F) (1	PRESSURE IN-WATER)	EFF (FRAC)	EFF (FRAC)		AN FAI NT CONTROL		RATIO (FRAC)	

SUPPLY	442.	1.00 0.0	84 0.58		0.0 0.5	0.00	DRAW-THR	U CYCLII	NG 1.0	00 0.3	30	
ZONE		SUPPLY FLOW	EXHAUST FLOW	FAN	MINIMUM FLOW	OUTSIDE AIR FLOW	COOLING CAPACITY	SENSIBLE	EXTRACTION RATE	HEATING CAPACITY	ADDITION RATE	ZONE
NAME		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L7 W (G.WSW	V5) APT1	442.	58.	0.011	1.000	0.	0.00	0.00	9.47	0.00	-15.68	1.

REPORT- SV-A Sys	tem Design	Parameters	for	ь7	Sys1	(PVVT)	(G.S6)
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SYSTEM	ALTITUDE	FLOOR AREA	MA2	OUTS		OOLING PACITY S	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMI	
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	TIO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	2069.4	4.	0.0	000	18.000	0.884	-21.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STA'	TIC TOTA	AL MECH	I		MAX FAN	MIN FAI	Ŋ
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	URE EI	F EFF	F	AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	533.	1.00	0.101	0.58		0.0 0.9	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	(KBTU/HR) MULT
Zn L7 S (G	.S6) APT3		533.	124.	0.024	1.000	0.	0.00	0.00	11.40	0.00	-18.88 1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.ESE7) WEATHER FILE- SEATTLE BOEING FI												NG FI WA
		FLOOR		OUTSI	DE COC	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1233.6	2.	0.0	00 12	.000	0.903	-15.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH	[		MAX FAN	I MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F.	AN FAI	N RATIC	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	(FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	321.	1.00	0.061	0.58	0.	0 0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
		SI	JPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		((	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L7 E (G.ESE7) APT1 321. 74. 0.015 1.000 0. 0.00 0.00 6.86 0.00 -11.36 1.

Zn L7 W (G.W8) APT1

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.W8)

259.

39.

0.008

1.000 0. 0.00 0.00 4.57

0.00 -9.19 1.

SYSTEM	ALTITUDE	FLOOR AREA	MAΣ	OUTSI		LING CITY S	ENSIBLE	HEATING CAPACITY	COOLING	HEATING EIR			
TYPE	FACTOR	(SQFT )	PEOPLE					(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR		
PVVT	1.000	640.8	1.	. 0.0	000 6	5.000	0.813	-9.000	0.173	0.173	0.00	0	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FA	N MIN FA	N	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUE	E EF	F EFF	FA	AN FA	AN RATI	O RATI	0	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	(FRAC	) (FRAC)	PLACEMEN	NT CONTRO	OL (FRAC	) (FRAC	)	
SUPPLY	259.	1.00	0.049	0.58	0.	0 0.5	0.00	DRAW-THE	RU CYCLIN	NG 1.0	0 0.3	0	
		s	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	EXTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE 2	ZONE
NAME		(	CFM ) (	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR) N	MULT

REPORT- SV-A System Design Parameters for L	7 Sys1	(PVVT)	(G.NW9)
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	-	_		-								
SYSTEM	ALTITUDE	FLOOR AREA	MA:	OUTS		DOLING PACITY	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUME	
TYPE	FACTOR	(SOFT )	PEOPL			FACIII . FU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
1112	11101011	(bgri )	12012	- 1411	110 (112	20,1111,	(DIII)	(11210/1111)	(210, 210,	(210,210,	(11210)1111)	
PVVT	1.000	938.6	2	. 0.0	000	12.000	0.852	-12.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STA'	ric Tota	AL MECH	]		MAX FAN	MIN FAN	I
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	JRE E	FF EFF	· F	AN FA	N RATIC	RATIO	)
TYPE	(CFM)	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	400.	1.00	0.076	0.58		0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.30	)
		S	UPPLY E	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L7 N (6	G.NW9) APT1	-	400.	56.	0.011	1.000	0.	0.00	0.00	8.56	0.00	-14.18 1.

REPORT- SV-A System Design Parameters for	L7 Sys1 (PVVT) (G.NE10)	WEATHER FILE- SEATTLE BOEING FI WA
TI OOD	01777777777777777777777777777777777777	

FLOOR OUTSIDE COOLING HEATING COOLING HEATING HEAT PUMP SYSTEM ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR EIR SUPP-HEAT TYPE FACTOR (SOFT) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (KBTU/HR)	
TYPE FACTOR (SOFT) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR)	
PVVT 1.000 681.8 1. 0.000 6.000 0.870 -6.700 0.173 0.173 0.000	
DIVERSITY POWER FAN STATIC TOTAL MECH MAX FAN MIN FAN	
FAN CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN FAN RATIO RATIO	
TYPE (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC) (FRAC)	
SUPPLY 165. 1.00 0.031 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30	
SUPPLY EXHAUST MINIMUM OUTSIDE COOLING EXTRACTION HEATING ADDITIO	
ZONE FLOW FLOW FAN FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY RAT	ZONE
NAME (CFM ) (CFM ) (KW) (FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR	MULT
Zn L7 N (G.NE10) APT1 165. 41. 0.008 1.000 0. 0.00 0.00 3.53 0.00 -5.8	1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.NW11) WEATHER FILE- SEATTLE BOEING FI												NG FI WA
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	711.4	1.	0.0	00 6	.000	0.851	-6.700	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	186.	1.00	0.035	0.58	0.	0 0.5	0.00	DRAW-TH	RU CYCLIN	g 1.00	0.30	
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L7 N (G.NW11) APT1 186. 43. 0.008 1.000 0. 0.00 3.98 0.00 -6.59 1.

Zn L7 N (G.NE12) APT1

5.90

0.00 -9.77 1.

1.000 0. 0.00 0.00

276.

76.

0.015

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.NE12) WEATHER FILE- SEATTLE BOEING F												NG FI WA
		FLOOR		OUTSI		OLING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM TYPE	ALTITUDE FACTOR	AREA (SOFT )	MAX PEOPLE			ACITY :	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1265.9	2.	0.0	000	9.000	0.847	-12.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STAT	'IC TOTA	AL MECH	I		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE E	FF EFF	F.	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	276.	1.00	0.052	0.58	0	.0 0.!	50 0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
		q	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	r.	XTRACTION	HEATING .	ADDITION
ZONE		5	FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(		CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)				KBTU/HR) MULT

REPORT- SV	/-A System	Design Para	meters for	L7 Sys	1 (PVVT)	(G.ESE13			WEATHER FILE- SEATTLE BOEING FI WA			
SYSTEM	ALTITUDE	FLOOR AREA	MAX	OUTSI A	DE COO. IR CAPA	LING CITY S	ENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMP	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	679.6	1.	0.0	00 6	.000	0.936	-6.700	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI					MAX FAN		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR				AN FAI			
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	116.	1.00	0.022	0.58	0.	0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
ZONE			FLOW	HAUST FLOW	FAN	MINIMUM FLOW	OUTSIDE AIR FLOW	CAPACITY	SENSIBLE		CAPACITY	ADDITION RATE ZONE
NAME		( (	CFM ) (	CFM )	(KW)	(FRAC)	(CFM)	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L7 E (G.ESE13) APT1 116. 41. 0.008 1.000 0. 0.00 0.00 2.48 0.00 -4.11 1.

485.

58.

0.011

Zn L8 W (M.WSW20) APT1

0.00 10.37

0.00 -17.18 6.

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.WSW20) WEATHER FILE- SEATTLE BOEING											G FI WA	
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A:	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	5740.4	11.	0.00	00 93	.000	0.866	-105.000	0.170	0.171	0.000	
		DIVERSITY	POWER	FAN	STATIO	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURI	E EF	F EFF	F	an fai	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	2908.	1.00	0.550	0.58	0.0	0 0.5	0 0.00	DRAW-TH	RU CYCLING	3 1.00	0.30	
		SU	PPLY EX	HAUST	I	MINIMUM	OUTSIDE	COOLING	ΕΣ	KTRACTION	HEATING A	DDITION
ZONE		:	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( C:	FM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (K	BTU/HR) MULT

1.000 0. 0.00

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.S21)

	-			-									
		FLOOR		OUTS	IDE C	OOLING		HEATING	COOLING	HEATING		₽	
SYSTEM	ALTITUDE	AREA	MAX	Z Z	AIR CA	PACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA'	Г	
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	rio (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)	
PVVT	1.000	12416.1	23.	0.0	000 1	20.000	0.884	-135.000	0.169	0.171	0.00	0	
		DIVERSITY	POWER	FAN	STA	TIC TO	TAL MEC	H		MAX FAI	N MIN FA	N	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	URE 1	EFF EF	F F	AN FA	N RATIO	O RATI	0	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FR	AC) (FRAC	) PLACEME	NT CONTRO	L (FRAC	) (FRAC	)	
SUPPLY	3581.	1.00	0.677	0.58		0.0 0	.50 0.0	0 DRAW-TH	RU CYCLIN	IG 1.00	0.3	0	
		S	UPPLY EX	KHAUST		MINIMUI	M OUTSID	E COOLING	E	XTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLO	W AIR FLO	W CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZON	E
NAME		,		CFM )	(KW)	(FRAC		) (KBTU/HR)		(KBTU/HR)		(KBTU/HR) MUL'	
NAME		(	CrM /	(CFM)	(VW)	(FRAC	) (CFM	( KDIU/HR)	(FRAC)	(NDIU/HR)	(KDIU/HK)	(VDIO/UK) MOP	T
Zn L8 S (M	.S21) APT3		597.	124.	0.024	1.00	0 0	. 0.00	0.00	12.77	0.00	-21.15 6	

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.ESE22)

SUPPLY EXHAUST

WEATHER FILE- SEATTLE BOEING FI WA

EXTRACTION HEATING ADDITION

\_\_\_\_\_ FLOOR OUTSIDE COOLING HEATING COOLING HEATING HEAT PUMP AIR CAPACITY SENSIBLE CAPACITY SYSTEM ALTITUDE AREA MAX EIR EIR SUPP-HEAT AIR CAFACILI RATIO (KBTU/HR) PEOPLE FACTOR (SQFT) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) TYPE PVVT 1.000 7401.4 14. 0.000 81.000 0.901 -90.000 0.170 0.172 0.000 POWER FAN STATIC TOTAL MECH DEMAND DELTA-T PRESSURE EFF EFF MAX FAN MIN FAN DIVERSITY FAN FAN FAN CAPACITY FACTOR RATIO RATIO (CFM ) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC) SUPPLY 2203. 1.00 0.416 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30

	DOFFEL	EMIMODI		LITIATLICIA	OUIDIDE	COOLING	1	MICHCITON	HEATING	ADDITION	
ZONE	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L8 E (M.ESE22) APT1	367.	74.	0.015	1.000	0.	0.00	0.00	7.86	0.00	-13.01	6.

MINIMUM OUTSIDE

COOLING

REPORT-	SV-A	System	Design	Parameters	for	L8	Sys1	(PVVT)	(M.W23)

		FLOOR		OUTSI	IDE CO	OOLING		HEATING	COOLING	HEATING	HEAT PUME	
SYSTEM	ALTITUDE	AREA	MAX		AIR CAI	PACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	rio (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	3844.9	7.	0.0	000 !	51.000	0.853	-57.000	0.171	0.172	0.000	)
		DIVERSITY	POWER	FAN	STA	TIC TOTA	AL MECH	Į.		MAX FAN	MIN FAN	ī
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EI	FF EFF	F.	AN FA	N RATIO	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	1704.	1.00	0.322	0.58	(	0.0 0.9	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L8 W (M	1.W23) APT1		284.	39.	0.008	1.000	0.	0.00	0.00	6.08	0.00	-10.07 6.

REPORT- SV-A System Design Parameters for	L8 Sys1 (PVVT) (M.NW24)	WEATHER FILE- SEATTLE BOEING FI WA

	FLOOR		OUTSI	DE COOL:	ING		HEATING	COOLING	HEATING	HEAT PUMI	?
ALTITUDE	AREA	MAX	. A	IR CAPAC:	ITY SI	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	r ·
FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/I	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
1.000	5631.6	11.	0.0	00 72.0	000	0.838	-81.000	0.170	0.172	0.000	)
	DIVERSITY	POWER	FAN	STATIC							
CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFI	F EFF	F	AN FAI	N RATIO	O RATIO	)
(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC	) (FRAC	)
2647.	1.00	0.500	0.58	0.0	0.50	0.00	DRAW-THI	RU CYCLIN	G 1.0	0.30	)
	S									HEATING CAPACITY	ADDITION RATE ZONE
	(					(CFM )	(KBTU/HR)				(KBTU/HR) MULT
	FACTOR 1.000 CAPACITY (CFM )	ALTITUDE AREA (SQFT )  1.000 5631.6  DIVERSITY FACTOR (FRAC)  2647. 1.00	ALTITUDE AREA MAX FACTOR (SQFT) PEOPLE  1.000 5631.6 11.  CAPACITY FACTOR DEMAND (KW)  2647. 1.00 0.500  SUPPLY EXPLOYED	ALTITUDE AREA MAX A FACTOR (SQFT ) PEOPLE RAT  1.000 5631.6 11. 0.0  DIVERSITY POWER FAN DEMAND DELTA-T (CFM ) (FRAC) (KW) (F)  2647. 1.00 0.500 0.58  SUPPLY EXHAUST FLOW FLOW	ALTITUDE AREA MAX AIR CAPACT FACTOR (SQFT ) PEOPLE RATIO (KBTU/I  1.000 5631.6 11. 0.000 72.0  DIVERSITY POWER FAN STATIC CAPACITY FACTOR DEMAND DELTA-T PRESSURE (CFM ) (FRAC) (KW) (F) (IN-WATER)  2647. 1.00 0.500 0.58 0.00  SUPPLY EXHAUST METERS FAN FELOW FAN FAN FAN FELOW FAN FAN FAN FAN FELOW FAN FAN FAN FAN FAN FAN FELOW FAN	ALTITUDE AREA MAX AIR CAPACITY SIFECTION (SQFT ) PEOPLE RATIO (KBTU/HR)  1.000 5631.6 11. 0.000 72.000  DIVERSITY POWER FAN STATIC TOTAL FACTOR DEMAND DELTA-T PRESSURE EFFECTION (FRAC) (KW) (F) (IN-WATER) (FRAC)  2647. 1.00 0.500 0.58 0.0 0.50  SUPPLY EXHAUST MINIMUM FAN FLOW FAN FLOW	ALTITUDE AREA MAX AIR CAPACITY SENSIBLE RATIO (SQFT) PEOPLE RATIO (KBTU/HR) (SHR)  1.000 5631.6 11. 0.000 72.000 0.838  DIVERSITY POWER FAN STATIC TOTAL MECH STATIC (CFM) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC)  2647. 1.00 0.500 0.58 0.0 0.50 0.00  SUPPLY EXHAUST MINIMUM OUTSIDE FLOW FLOW FAN FLOW AIR FLOW	ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY FACTOR (SQFT ) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR)  1.000 5631.6 11. 0.000 72.000 0.838 -81.000  DIVERSITY POWER FAN STATIC TOTAL MECH SEFF (CFM) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT (FRAC) (FRAC) 0.50 0.50 0.50 0.00 DRAW-THE SUPPLY EXHAUST MINIMUM OUTSIDE COOLING FLOW FLOW FAN FLOW AIR FLOW CAPACITY	ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR FACTOR (SQFT ) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU)  1.000 5631.6 11. 0.000 72.000 0.838 -81.000 0.170  DIVERSITY POWER FAN STATIC TOTAL MECH (CFM ) (FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN FACTOR (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL 2647. 1.00 0.500 0.58 0.0 0.50 0.00 DRAW-THRU CYCLIN FLOW FLOW FLOW FAN FLOW AIR FLOW CAPACITY SENSIBLE	ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY (STU/HR)	ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR EIR SUPP-HEAT FACTOR (SQFT ) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR)  1.000 5631.6 11. 0.000 72.000 0.838 -81.000 0.170 0.172 0.000  DIVERSITY POWER FAN STATIC TOTAL MECH FAN FAN RATIO RATIO (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC) (FRAC)  2647. 1.00 0.500 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30  SUPPLY EXHAUST MINIMUM OUTSIDE COOLING EXTRACTION HEATING FAN FLOW FLOW FLOW FLOW FAN FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY

Zn L8 N (M.NW24) APT1 441. 56. 0.011 1.000 0. 0.00 9.44 0.00 -15.63 6.

REPORT- SV-A System Design Parameters for	L8 Sys1 (PVVT) (M.NE25)	WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR AREA	MAX	OUTS		OOLING PACITY S	ENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUME	
TYPE	FACTOR	(SOFT )	PEOPL			TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
						-, ,	,		, -, -,	, -, -,	,	
PVVT	1.000	4090.5	8	. 0.0	000 3	36.000	0.848	-39.000	0.172	0.173	0.000	)
		DIVERSITY	POWER	FAN	STAT	TIC TOTA	L MECH	I		MAX FAN	MIN FAI	I
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EF	'F EFF	F	AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	ER) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	
SUPPLY	1147.	1.00	0.217	0.58	(	0.0 0.5	0.00	DRAW-THI	RU CYCLIN	G 1.00	0.30	)
			IIDDI II DI	7113 110m		MINITAGEN	OT THE T THE	G007 TNG		vmp a cm r oar	III A III TAG	ADDITION
FONT		5		KHAUST		MINIMUM	OUTSIDE			XTRACTION	HEATING	ADDITION
ZONE		,	FLOW	FLOW	FAN	FLOW	AIR FLOW		SENSIBLE		CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	KBTU/HR) MULT
7 TO N /N	A MESEL ADE	11	1.01	41	0.008	1.000	0.	0.00	0.00	4 00	0 00	-6.77 6.
Zn L8 N (M	1.NE25) APT	1	191.	41.	0.008	1.000	0.	0.00	0.00	4.09	0.00	-6.77 6.

REPORT- SV	-A System	Design Para	meters for	L8 Sys	1 (PVVT) (	M.NW26)			WEATH	ER FILE- SE	ATTLE BOEIN	NG FI WA
		FLOOR		OUTSI	DE COOL	ING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPAC	ITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	4268.2	8.	0.0	00 45.	000	0.854	-51.000	0.172	0.172	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF	F EFF	F	an fai	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	1429.	1.00	0.270	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLING	J 1.00	0.30	
		S		HAUST		INIMUM	OUTSIDE			KTRACTION		ADDITION
ZONE		,	FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (F	(BTU/HR) MULT

Zn L8 N (M.NW26) APT1 238. 43. 0.008 1.000 0. 0.00 5.09 0.00 -8.44 6.

REPORT- SV	-	Design Para		_			)		WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAP	ACITY :	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	7595.5	14.	0.0	00 6	6.000	0.908	-72.000	0.171	0.172	0.000	
		DIVERSITY	POWER	FAN	STAT					MAX FAN		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU		FF EFF		AN FA			
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	1711.	1.00	0.323	0.58	0	.0 0.	50 0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
		S	UPPLY EXI	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L8 N (M	.NE27) APT	1	285.	76.	0.015	1.000	0.	0.00	0.00	6.10	0.00	-10.11 6.

REPORT- SV-A System Design Parameters for	L8 Sys1	(PVVT)	(M.ESE28)
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REPORT- SV	7-A System	Design Para	meters for	L8 Sys	1 (PVVT) (	M.ESE28	)		WEATH	ER FILE- SE	EATTLE BOE	ING FI WA
		FLOOR		OUTSII	DE COOL	ING		HEATING	COOLING	HEATING	HEAT PUM	P
SYSTEM	ALTITUDE	AREA	MAX	A:	IR CAPAC	ITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA	Т
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	4077.3	8.	0.00	00 33.	000	0.923	-36.000	0.172	0.173	0.00	0
		DIVERSITY	POWER	FAN	STATIC	TOTA	L MECH			MAX FAN	N MIN FA	N
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF	F EFF	FA	N FA	N RATIO	) RATI	0
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC	) (FRAC)	PLACEMEN	T CONTRO	L (FRAC)	(FRAC	)
SUPPLY	793.	1.00	0.150	0.58	0.0	0.5	0.00	DRAW-THR	U CYCLIN	G 1.00	0.3	0
		s	UPPLY EX	HAUST	М	INIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	(KBTU/HR)	(KBTU/HR) MULT

Zn L8 E (M.ESE28) APT1 132. 41. 0.008 1.000 0. 0.00 0.00 2.83 0.00 -4.68 6.

REPORT- SV-A System Design Parameters for	L14 Sys1 (PVVT) (T.WSW35)	WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING		
SYSTEM	ALTITUDE	AREA	MAX	K A	IR CAP.	ACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA'	Γ
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	IO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	956.7	2.	0.0	00 1	8.000	0.879	-18.000	0.173	0.173	0.00	0
					-					***		-
		DIVERSITY	POWER	FAN	STAT	IC TOT	AL MECH			MAX FA	N MIN FA	NT.
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE E	FF EFF	F2	AN FA	N RATI	O RATI	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRA	C) (FRAC)	PLACEMEN	NT CONTRO	L (FRAC	) (FRAC	)
SUPPLY	545.	1.00	0.103	0.58	0	.0 0.	50 0.00	DRAW-THE	RU CYCLIN	IG 1.0	0 0.3	n
501121	515.	1.00	0.103	0.50	ŭ		0.00	214111 1111	010211	1.0	0.5	•
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR) MULT

Zn L14 W (T.WSW35) APT1 545. 58. 0.011 1.000 0. 0.00 11.66 0.00 -19.31 1.

SUPPLY

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.S36)

WEATHER FILE- SEATTLE BOEING FI WA

\_\_\_\_\_ FLOOR MAX OUTSIDE COOLING HEATING COOLING HEATING HEAT PUMP AIR CAPACITY SENSIBLE CAPACITY
RATIO (KBTU/HR) (SHR) (KBTU/HR) SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT ) EIR EIR SUPP-HEAT MAX PEOPLE (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) 4. PVVT 1.000 2069.4 0.000 24.000 0.882 -27.000 0.172 0.173 0.000 POWER FAN STATIC TOTAL MECH DEMAND DELTA-T PRESSURE EFF EFF FAN FAN DIVERSITY MAX FAN MIN FAN FAN CAPACITY FACTOR RATIO RATIO TYPE (CFM ) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL

EXTRACTION HEATING ADDITION SUPPLY EXHAUST MINIMUM OUTSIDE COOLING FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY FAN ZONE FLOW FLOW RATE ZONE NAME (CFM ) (CFM ) (KW) (FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) MULT Zn L14 S (T.S36) APT3 731. 124. 0.024 1.000 0. 0.00 0.00 15.64 0.00 -25.90 1.

731. 1.00 0.138 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30

REPORT- SV-A System Design Parameters for	L14 Sys1 (PVVT) (T.ESE37)	WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SOFT )	MA: PEOPLI		AIR CA	OOLING PACITY TU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMI SUPP-HEAT	r
PVVT	1.000	1233.6	2			18.000	0.881	-21.000	0.173	0.173	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F)	STA' PRESS	URE E	FF EFF	F.	AN FA NT CONTRO		) RATIO	
SUPPLY	556.	1.00	0.105	0.58		0.0 0.						
ZONE NAME			FLOW	KHAUST FLOW (CFM )	FAN	MINIMUM FLOW (FRAC)		CAPACITY	SENSIBLE	XTRACTION RATE (KBTU/HR) (	HEATING CAPACITY KBTU/HR)	ADDITION RATE ZONE (KBTU/HR) MULT
Zn L14 E (	T.ESE37) A	PT1	556.	74.	0.015	1.000	0.	0.00	0.00	11.89	0.00	-19.70 1.

REPORT- SV-A System Design Parameters for	L14 Sys1 (PVVT) (T.W38)	WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR AREA	MAX		AIR CAI		SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUME SUPP-HEAT	?
TYPE	FACTOR	(SQFT )	PEOPLI	E RAT	TIO (KBT	ru/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	640.8	1	. 0.0	000	9.000	0.851	-9.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STAT	TIC TOTA	AL MECH			MAX FAN	I MIN FAI	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EI	FF EFF	F2	AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	ER) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	
SUPPLY	317.	1.00	0.060	0.58	(	0.0 0.5	50 0.00	DRAW-THI	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	KBTU/HR) MULT
Zn L14 W (	T.W38) APT	1	317.	39.	0.008	1.000	0.	0.00	0.00	6.78	0.00	-11.23 1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.NW39)

avamny.		FLOOR		OUTS		OOLING		HEATING	COOLING	HEATING	HEAT PUME	
SYSTEM	ALTITUDE	AREA	MAX	Δ	AIR CAI	PACITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	rio (KB1	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	938.6	2.	. 0.0	000 1	2.000	0.826	-15.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STAT					MAX FAN		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE EF	'F EFF	F	AN FA	N RATIO	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	ER) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	486.	1.00	0.092	0.58	(	0.0 0.5	0.00	DRAW-THI	RU CYCLIN	G 1.00	0.30	
		S	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	(KBTU/HR) (	KBTU/HR) MULT
Zn L14 N (	(T.NW39) AP	Т1	486.	56.	0.011	1.000	0.	0.00	0.00	9.35	0.00	-17.24 1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.NE40) WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR AREA	MAX		R CAPACI	TY SE	ENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMP	
TYPE	FACTOR	(SQFT )	PEOPLE				(SHR)	-6.700	(BTU/BTU) 0.173	(BTU/BTU) 0.173	(KBTU/HR)	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F) (	STATIC PRESSURE IN-WATER)	TOTAL EFF (FRAC)	F EFF				RATIO	
SUPPLY	192.	1.00	0.036	0.58	0.0	0.50	0.00	DRAW-THE	RU CYCLING	3 1.00	0.30	
ZONE NAME			FLOW	HAUST FLOW CFM )	FAN	NIMUM FLOW FRAC)	OUTSIDE AIR FLOW (CFM )		SENSIBLE		CAPACITY	ADDITION  RATE ZONE  KBTU/HR) MULT

Zn L14 N (T.NE40) APT1 192. 41. 0.008 1.000 0. 0.00 4.10 0.00 -6.80 1.

239.

43.

0.008

Zn L14 N (T.NW41) APT1

1.000 0. 0.00 0.00 4.62

0.00 -8.46 1.

REPORT- SV	7-A System	Design Param	meters for	L14 Sy	s1 (PVVT)	(T.NW41	.)		WEATH	ER FILE- SE	ATTLE BOEIN	NG FI WA
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A.	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	711.4	1.	0.0	00 6	.000	0.819	-9.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIO	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURI	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	239.	1.00	0.045	0.58	0.0	0.5	0 0.00	DRAW-TH	RU CYCLIN	g 1.00	0.30	
		SU	JPPLY EX	HAUST	I	MUMINIM	OUTSIDE	COOLING	E	XTRACTION	HEATING A	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( (	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (F	KBTU/HR) MULT

REPORT- SV-A	System Design	Parameters	for L	14 Sys1	(PVVT)	(T.NE42)
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	-	_		-								
SYSTEM	ALTITUDE	FLOOR AREA	MA	OUTS:		OOLING PACITY	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMI	
TYPE	FACTOR	(SQFT )	PEOPL	E RAT	rio (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	1265.9	2	. 0.0	000	12.000	0.849	-15.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STA	TIC TOTA	AL MECH	I		MAX FAN	MIN FAI	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	URE E	FF EFF	F.	AN FA	N RATIO	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	442.	1.00	0.084	0.58		0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY E	XHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	(KBTU/HR) MULT
Zn L14 N (	T.NE42) AP	т1	442.	76.	0.015	1.000	0.	0.00	0.00	9.47	0.00	-15.68 1.

REPORT- SV-A System Design Parameters for	L14 Sys1 (PVVT) (T.ESE43)	WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SOFT )	MA: PEOPL		AIR CA	OOLING PACITY TU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUM SUPP-HEA (KBTU/HR	T
PVVT	1.000	679.6	1			6.000	0.843	-9.000	0.173	0.173	0.00	
1 4 4 1	1.000	075.0	<u> </u>	. 0.0	,00	0.000	0.013	3.000	0.173	0.173	0.00	o .
		DIVERSITY	POWER	FAN	STA'	TIC TO	AL MEC	Н		MAX FAN	MIN FA	N
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	URE I	FF EF	F F	'AN FA	N RATIO	) RATI	0
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC	) PLACEME	NT CONTRO	L (FRAC)	(FRAC	)
SUPPLY	221.	1.00	0.042	0.58		0.0 0.	50 0.0	0 DRAW-TH	RU CYCLIN	IG 1.00	0.3	0
		S	UPPLY EX	KHAUST		MINIMUN	1 OUTSID	E COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOV	AIR FLO	W CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC	(CFM	) (KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	(KBTU/HR) MULT
Zn L14 E (	T.ESE43) A	PT1	221.	41.	0.008	1.000	0	. 0.00	0.00	4.73	0.00	-7.83 1.

REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.SW5) WEATHER FILE- SEATTLE BOEING FI												NG FI WA
		FLOOR		OUTSI	DE COC	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1302.8	2.	0.0	00 21	.000	0.882	-21.000	0.172	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	(FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	597.	1.00	0.113	0.58	0.	0 0.5	0.00	DRAW-TH	RU CYCLING	G 1.00	0.30	
		S		HAUST		MINIMUM	OUTSIDE			XTRACTION		ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L15 S (G.SW5) APT1 597. 78. 0.015 1.000 0. 0.00 12.77 0.00 -21.15 1.

REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.W6) WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI	DE CO	OOLING		HEATING	COOLING	HEATING	HEAT PUM	
SYSTEM	ALTITUDE	AREA	MAX	ζ 2	AIR CAE	PACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	?
TYPE	FACTOR	(SQFT )	PEOPLI	E RAT	CIO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	
PVVT	1.000	640.8	1	. 0.0	000	9.000	0.853	-9.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STAT	TIC TOT	AL MECH	I		MAX FAN	MIN FAI	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE E	FF EFF	F	AN FA	N RATIO	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	
SUPPLY	301.	1.00	0.057	0.58	(	0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.30	)
		s	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	KBTU/HR) MULT
Zn L15 W (	G.W6) APT1		301.	39.	0.008	1.000	0.	0.00	0.00	6.44	0.00	-10.67 1.

REPORT- SV-A	System Design	Parameters for	L15 Sys1	(PVVT)	(G.NW7)
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REPORT- SV	-A System	Design Para	meters for	L15 Sys	s1 (PVVT)	(G.NW7)			WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSII	DE C001	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A]	IR CAPAC	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATI	IO (KBTU,	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	937.6	2.	0.00	00 12	.000	0.834	-15.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIO	C TOTAL	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURI	E EF	F EFF	F	an fai	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F) (	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	456.	1.00	0.086	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLING	J 1.00	0.30	
		S		HAUST		MINIMUM	OUTSIDE			KTRACTION		ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (C	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L15 N (G.NW7) APT1 456. 56. 0.011 1.000 0. 0.00 9.47 0.00 -16.16 1.

		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING	HEAT PUME	)
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAP	ACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	1
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	543.9	5.	0.0	00 2	4.000	1.000	-27.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STAT	'IC TOTA	AL MECH	I		MAX FAN	MIN FAN	ī
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE E	F EFF	' FA	AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRAC	(FRAC)	PLACEMEN	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	199.	1.00	0.038	0.58	0	.0 0.5	0.00	DRAW-THE	RU CYCLIN	G 1.00	0.30	
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L15 N (	G.NE8) AMN	1	199.	0.	0.000	1.000	0.	0.00	0.00	4.27	0.00	-7.07 1.

NAME

Zn L15 N (G.NE9) AMN

REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.NE9)

(CFM )

0.

(CFM)

643.

FAN

0.000

(FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR) MULT

0.00 13.75

0.00 -22.77 1.

WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSID	E COOLI	NG		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	AI	R CAPACI	TY SE	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATI	O (KBTU/H	R)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1484.8	15.	0.00	0 21.0	00	0.874	-24.000	0.172	0.173	0.000	
			D. 0.1.T.D.									
		DIVERSITY	POWER	FAN	STATIC	TOTAL				MAX FAN		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	F EFF	F	an fai	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F) (	IN-WATER)	(FRAC)	(FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	643.	1.00	0.121	0.58	0.0	0.50	0.00	DRAW-TH	RU CYCLING	1.00	0.30	
		SI	JPPLY EX	HAUST	MI	NIMUM	OUTSIDE	COOLING	E	KTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE

1.000 0. 0.00

REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.SSE12) WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI	DE CO	OOLING		HEATING	COOLING	HEATING	HEAT PUME	
SYSTEM	ALTITUDE	AREA	MAX	I P	AIR CAI	PACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	:
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	CIO (KB	ru/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1375.0	14.	0.0	000	18.000	1.000	-54.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STA	FIC TOTA	AL MECH	I		MAX FAN	MIN FAN	I
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	JRE E	FF EFF	F	AN FA	N RATIO	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRA	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	696.	1.00	0.132	0.58	(	0.0 0.	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L15 S (	(G.SSE12) F	'IT	696.	0.	0.000	1.000	0.	0.00	0.00	14.89	0.00	-24.66 1.

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT)	(G SW5)

	-	_		-								
		FLOOR		OUTSI	DE C	OOLING		HEATING	COOLING	HEATING	HEAT PUME	)
SYSTEM	ALTITUDE	AREA	MAX	. A	IR CA	PACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	1
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	'IO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1361.3	3.	0.0	000	18.000	0.860	-21.000	0.173	0.173	0.000	ı
		DIVERSITY	POWER	FAN	STA	FIC TOTA	AL MECH	I		MAX FAN	MIN FAN	ī
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSI	JRE EI	FF EFF	F	AN FA	N RATIC	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FRAC	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	572.	1.00	0.108	0.58	(	0.0 0.9	50 0.00	DRAW-TH	RU CYCLIN	IG 1.00	0.30	1
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM)	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L16 S (	G.SW5) API	1:1	572.	82.	0.016	1.000	0.	0.00	0.00	12.23	0.00	-20.26 1.

Zn L16 W (G.W6) APT1

0.00 0.00 5.79

0.00 -9.58 1.

REPORT- SV-	A System	Design	Parameters	for	L16	Sys1	(PVVT)	(G.W6)
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WEATHER FILE- SEATTLE BOEING FI WA \_\_\_\_\_\_ OUTSIDE COOLING HEATING
AIR CAPACITY SENSIBLE CAPACITY
RATIO (KBTU/HR) (SHR) (KBTU/HR) HEATING COOLING HEATING HEAT PUMP CAPACITY EIR EIR SUPP-HEAT FLOOR MAX SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT) EIR SUPP-HEAT MAX PEOPLE (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) PVVT 1.000 640.8 0.000 9.000 0.870 -9.000 0.173 0.173 POWER FAN STATIC TOTAL MECH
DEMAND DELTA-T PRESSURE EFF EFF FAN FAN DIVERSITY MAX FAN MIN FAN FAN CAPACITY FACTOR RATIO TYPE (CFM ) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL SUPPLY 270. 1.00 0.051 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30 MINIMUM OUTSIDE COOLING EXTRACTION HEATING ADDITION FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY RATE SUPPLY EXHAUST MINIMUM OUTSIDE COOLING FAN FLOW FLOW RATE ZONE NAME (CFM ) (CFM ) (KW) (FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) MULT

270. 39. 0.008 1.000 0.

ZONE

NAME

Zn L16 N (G.NW7) APT1

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.NW7)

SUPPLY EXHAUST

FLOW

(CFM )

56.

FLOW

(CFM)

420.

FAN

0.011

MINIMUM OUTSIDE COOLING EXTRACTION HEATING ADDITION FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY RATE

(FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) (KBTU/HR) MULT

0.00

8.99

RATE ZONE

0.00 -14.90 1.

WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI	DE COOLI	NG		HEATING	COOLING	HEATING	HEAT PUMP
SYSTEM	ALTITUDE	AREA	MAX	. A	IR CAPACI	TY SEN	NSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/H	R)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	939.7	2.	0.0	12.0	00	0.845	-12.000	0.173	0.173	0.000
		DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH	I		MAX FAN	MIN FAN
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	r FA	AN FAI	N RATIO	RATIO
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMEN	NT CONTRO	L (FRAC)	(FRAC)
SUPPLY	420.	1.00	0.079	0.58	0.0	0.50	0.00	DRAW-THE	RU CYCLIN	J 1.00	0.30

1.000

0. 0.00

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.NE8)

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPACI	TY SE	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)
PVVT	1.000	676.2	1.	0.0	00 6.0	00	0.857	-6.700	0.173	0.173	0.000
		DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH	I		MAX FAN	MIN FAN
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FA FA	AN FAI	N RATIO	RATIO
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMEN	T CONTROL	L (FRAC)	(FRAC)
SUPPLY	179.	1.00	0.034	0.58	0.0	0.50	0.00	DRAW-THE	U CYCLING	1.00	0.30

	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	I	EXTRACTION	HEATING	ADDITION	
ZONE	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L16 N (G.NE8) APT1	179.	41.	0.008	1.000	0.	0.00	0.00	3.82	0.00	-6.33	1.

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.NNE9)

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPACI	TY SEI	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1195.4	2.	0.0	12.0	00	0.845	-15.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH	I		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	r F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEME	NT CONTROL	(FRAC)	(FRAC)	

SUPPLY	401.	1.00	0.076	0.58		0.0 0.5	0.00	DRAW-THR	U CYCLIN	IG 1.0	0.3	30	
		SUPP	LY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	EXTRACTION	HEATING	ADDITION	
ZONE		FL	OW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME		(CFM	) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L16 N (G.NN	E9) APT1	40	1.	72.	0.014	1.000	0.	0.00	0.00	8.58	0.00	-14.21	1.

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.S12)

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MA: PEOPL:		AIR CA	OOLING PACITY	SE	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMI SUPP-HEAT (KBTU/HR	
PVVT	1.000	766.1	1	. 0.0	000	9.000		0.911	-9.000	0.173	0.173	0.000	)
FAN	CAPACITY	DIVERSITY FACTOR	POWER DEMAND	FAN DELTA-T	STA PRESS		OTAL EFF			AN FA	MAX FAN N RATIO		
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (F	RAC)	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC	1
SUPPLY	234.	1.00	0.044	0.58		0.0	0.50	0.00	DRAW-THI	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY E	XHAUST		MINIM	UM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLO	OW .	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRA	C)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	KBTU/HR) MULT
Zn L16 S (	G.S12) APT	1	234.	46.	0.009	1.0	00	0.	0.00	0.00	5.02	0.00	-8.31 1.

337.

54.

0.011

Zn L16 S (G.SE13) APT1

1.000 0. 0.00 0.00 7.22

0.00 -11.95 1.

REPORT- SV	7-A System	Design Param	eters for	L16 Sys	s1 (PVVT)	(G.SE13	)		WEATH	ER FILE- SE	ATTLE BOEIN	G FI WA
		FLOOR		OUTSII	DE COOL	ING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A)	R CAPAC	ITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATI	O (KBTU/	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	898.6	2.	0.00	12.	000	0.897	-12.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF.	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F) (	IN-WATER)	(FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	337.	1.00	0.064	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLING	3 1.00	0.30	
		SU	PPLY EXI	HAUST	М	INIMUM	OUTSIDE	COOLING	EX	XTRACTION	HEATING A	DDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( C	PFM ) (0	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (K	BTU/HR) MULT

REPORT- SV	-A System	Design Para	meters for	L16 Sy	vs1 (PVVT	) (G.ENE	L4)		WEATH	IER FILE- SI	EATTLE BOI	EING FI WA	
		FLOOR		OUTS	IDE CO	OLING		HEATING	COOLING	HEATING	HEAT PUN	ΛP	
SYSTEM	ALTITUDE	AREA	MAX	ζ 2	AIR CAP	ACITY :	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA	TA	
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	TIO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HF	٤)	
PVVT	1.000	452.6	1.	0.0	000	6.000	0.850	-6.700	0.173	0.173	0.00	00	
		DIVERSITY	POWER	FAN	STAT	IC TOTA	AL MECH	I		MAX FAI	N MIN FA	/N	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE El	FF EFF	F F	AN FA	N RATIO	) RAT	0	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRA	C) (FRAC)	PLACEMEN	NT CONTRO	L (FRAC	) (FRAC	2)	
SUPPLY	216.	1.00	0.041	0.58	0	.0 0.!	50 0.00	DRAW-THI	RU CYCLIN	IG 1.00	0.3	30	
		S	SUPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY		RATE	CAPACITY	RATE	ZONE
NAME		(		CFM )	(KW)	(FRAC)	(CFM )						MULT
IVIIII		,	O211 /	,	(2011)	(1 Idic)	(0111)	(10210/1110)	(11110)	(1010/1110)	(10210/1110)	(10210/1110)	

Zn L16 E (G.ENE14) APT1 216. 27. 0.005 1.000 0. 0.00 0.00 4.61 0.00 -7.64 1.

Zn L17 S (M.SW20) APT1

0.00 0.00 13.02

0.00 -21.56 10.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.SW20) WEATHER FILE- SEATTLE BOEING FI WA

608. 82. 0.016 1.000 0.

\_\_\_\_\_ FLOOR MAX OUTSIDE COOLING HEATING COOLING HEATING HEAT PUMP AIR CAPACITY SENSIBLE CAPACITY
RATIO (KBTU/HR) (SHR) (KBTU/HR) EIR SYSTEM ALTITUDE AREA EIR SUPP-HEAT MAX PEOPLE ALTITUDE AREA FACTOR (SQFT) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) TYPE PVVT 1.000 13613.1 26. 0.000 195.000 0.864 -219.000 0.166 0.169 0.000 POWER FAN STATIC TOTAL MECH DEMAND DELTA-T PRESSURE EFF EFF DIVERSITY MAX FAN MIN FAN FAN FAN FAN CAPACITY FACTOR RATIO RATIO TYPE (CFM ) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL SUPPLY 6084. 1.00 1.150 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30 EXTRACTION HEATING ADDITION SUPPLY EXHAUST MINIMUM OUTSIDE COOLING FAN FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY ZONE FLOW FLOW RATE ZONE NAME (CFM ) (CFM ) (KW) (FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) MULT Zn L17 W (M.W21) APT1

0.00 0.00

6.26

0.00 -10.38 10.

REPORT- SV-A System I	Design Parameters	for L17	Sys1	(PVVT)	(M.W21)
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WEATHER FILE- SEATTLE BOEING FI WA \_\_\_\_\_\_ OUTSIDE COOLING HEATING
AIR CAPACITY SENSIBLE CAPACITY
RATIO (KBTU/HR) (SHR) (KBTU/HR) HEATING COOLING HEATING HEAT PUMP SIBLE CAPACITY EIR EIR SUPP-HEAT FLOOR MAX SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT) EIR SUPP-HEAT MAX PEOPLE (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) 1.000 6408.2 12. PVVT 0.000 84.000 0.846 -96.000 0.170 0.171 POWER FAN STATIC TOTAL MECH DEMAND DELTA-T PRESSURE EFF EFF FAN FAN DIVERSITY MAX FAN MIN FAN FAN CAPACITY FACTOR RATIO TYPE (CFM ) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL SUPPLY 2928. 1.00 0.553 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30 MINIMUM OUTSIDE COOLING EXTRACTION HEATING ADDITION FLOW AIR FLOW CAPACITY SENSIBLE RATE CAPACITY RATE SUPPLY EXHAUST MINIMUM OUTSIDE COOLING FAN FLOW FLOW RATE ZONE NAME (CFM ) (CFM ) (KW) (FRAC) (CFM ) (KBTU/HR) (FRAC) (KBTU/HR) (KBTU/HR) MULT

293. 39. 0.008 1.000 0.

REPORT-	SV-A System De	esign Parameters	for I	L17 Sys1	(PVVT)	(M.NW22)
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KEFORI SV	A System	Design rara	mecers for		SI (FVVI	/ (P1.1WWZ2	· /		WEATH	EK FIDE SE	AIIDE DOES	ING PI WA
		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING	HEAT PUME	>
SYSTEM	ALTITUDE	AREA	MAX		AIR CAPA	ACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	CIO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	9397.0	18.	0.0	000 120	6.000	0.840	-141.000	0.168	0.170	0.000	)
		DIVERSITY	POWER	FAN	STAT	IC TOT	AL MECH	I		MAX FAN	MIN FAN	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE EF	F EFF	F	AN FA	N RATIC	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	4593.	1.00	0.868	0.58	0	.0 0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM)	(KBTU/HR)	(FRAC)	(KBTU/HR) (	(KBTU/HR)	KBTU/HR) MULT
Zn L17 N (	(M.NW22) AP	т1	459.	56.	0.011	1.000	0.	0.00	0.00	9.83	0.00	-16.28 10.

REPORT-	SV-A	System	Design	Parameters	for	L17	Sys1	(PVVT)	(M.NE23)	WEA

		FLOOR		OUTSI	DE C	OOLING		HEATING	COOLING	HEATING	HEAT PUM	
SYSTEM	ALTITUDE	AREA	MAX	X P	AIR CA	PACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	:
TYPE	FACTOR	(SQFT )	PEOPL	E RAT	IO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	6761.5	13	. 0.0	000	66.000	0.851	-72.000	0.171	0.172	0.000	)
		DIVERSITY	POWER	FAN	STA'	TIC TO	TAL MEC	Н		MAX FAN	MIN FA	I
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESS	URE 1	EFF EF	F F	'AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	ER) (FR	AC) (FRAC	) PLACEME	NT CONTRO	L (FRAC)	(FRAC	
SUPPLY	2094.	1.00	0.396	0.58		0.0	.50 0.0	0 DRAW-TH	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY E	XHAUST		MINIMU	4 OUTSII	E COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLO	V AIR FLO	W CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC	(CFM	) (KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR)	KBTU/HR) MULT
Zn L17 N (N	M.NE23) AP	Т1	209.	41.	0.008	1.00	) (	. 0.00	0.00	4.48	0.00	-7.42 10.

REPORT- SV	-A System	Design Para	meters for	L17 Sys	s1 (PVVT)	(M.NNE2	4)		WEATH	ER FILE- SE	ATTLE BOEIN	NG FI WA
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	11953.6	22.	0.0	00 153	.000	0.868	-171.000	0.167	0.170	0.000	
		DIVERSITY	POWER	FAN	STATIO	C TOTA	L MECH	1		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURI	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	4903.	1.00	0.927	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLING	J 1.00	0.30	
		S		HAUST		MINIMUM	OUTSIDE			KTRACTION		ADDITION
ZONE		,	FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (F	(BTU/HR) MULT

Zn L17 N (M.NNE24) APT1 490. 72. 0.014 1.000 0. 0.00 10.49 0.00 -17.37 10.

Zn L17 S (M.S27) APT1

1.000 0. 0.00 0.00 5.44

0.00 -9.01 10.

254.

46.

0.009

REPORT- SV	7-A System	Design Para	meters for	L17 Sy	s1 (PVVT)	(M.S27)			WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSI	DE COO	OLING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	. A	IR CAPA	ACITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBT	J/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	7661.5	14.	0.0	00 83	L.000	0.875	-93.000	0.170	0.172	0.000	
		DIVERSITY	POWER	FAN	STAT	IC TOTA	L MECH	I		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUE	RE EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	R) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	2542.	1.00	0.480	0.58	0 .	.0 0.5	0.00	DRAW-TH	RU CYCLIN	J 1.00	0.30	
ZONE		S		HAUST	12 7 7 1	MINIMUM	OUTSIDE			XTRACTION		ADDITION
NAME		(	FLOW CFM ) (	FLOW CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	(KBTU/HR)			CAPACITY KBTU/HR) (1	RATE ZONE KBTU/HR) MULT

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.SE28									WEATHE	ER FILE- SE	ATTLE BOEIN	G FI WA
		FLOOR		OUTSID	DE COOL	ING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	AI	R CAPAC	ITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATI	O (KBTU/I	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	8986.5	17.	0.00	00 126.0	000	0.892	-141.000	0.168	0.170	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF:	F EFF	F	AN FAN	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F) (	IN-WATER)	(FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	3639.	1.00	0.688	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLING	1.00	0.30	
govr				HAUST		INIMUM	OUTSIDE			KTRACTION		DDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(CF	FM ) ((	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC) (	(KBTU/HR) (	KBTU/HR) (K	BTU/HR) MULT

Zn L17 S (M.SE28) APT1 364. 54. 0.011 1.000 0. 0.00 7.79 0.00 -12.89 10.

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPA		SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMI SUPP-HEAT (KBTU/HR)	
PVVT	1.000	4525.5	8.	0.0	00 72	.000	0.860	-81.000	0.170	0.172	0.000	)
		DIVERSITY	POWER	FAN	STATI					MAX FAI		
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR				AN FAI			
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	(FRAC)	PLACEMEI	NT CONTRO	L (FRAC)	(FRAC	
SUPPLY	2447.	1.00	0.462	0.58	0.	0 0.5	0.00	DRAW-THI	RU CYCLIN	G 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	KBTU/HR) MULT
Zn L17 E (	M.ENE29) AE	PT1	245.	27.	0.005	1.000	0.	0.00	0.00	5.23	0.00	-8.67 10.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.SW35)

WEATHER FILE- SEATTLE BOEING FI WA

-----FLOOR HEATING COOLING HEATING HEAT PUMP CAPACITY EIR EIR SUPP-HEAT OUTSIDE COOLING MAX AIR CAPACITY SENSIBLE CAPACITY EIR EIR SUPP-HEAT RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR) SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT) MAX PEOPLE PVVT 1.000 1361.3 0.000 21.000 0.877 -24.000 0.172 0.173 0.000 MAX FAN MIN FAN FAN FAN RATIO RATIO POWER FAN STATIC TOTAL MECH DEMAND DELTA-T PRESSURE EFF EFF DIVERSITY FAN CAPACITY FACTOR (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC) (FRAC) TYPE (CFM ) (FRAC) (KW) SUPPLY 633. 1.00 0.120 0.58 0.0 0.50 0.00 DRAW-THRU CYCLING 1.00 0.30

	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	E	EXTRACTION	HEATING	ADDITION	
ZONE	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L27 S (T.SW35) APT1	633.	82.	0.016	1.000	0.	0.00	0.00	13.54	0.00	-22.42	1.

Zn L27 W (T.W36) APT1

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.W36)									WEATH	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	640.8	1.	0.0	00 9	.000	0.853	-9.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	314.	1.00	0.059	0.58	0.	0 0.5	0 0.00	DRAW-TH	RU CYCLIN	g 1.00	0.30	
		SI	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING .	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( (	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

314. 39. 0.008 1.000 0. 0.00 0.00 6.71 0.00 -11.11 1.

REPORT- SV-A System Design Parameters for	L27 Sys1 (PVVT) (T.NW37)	WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI	DE COOL:	ING		HEATING	COOLING	HEATING	HEAT PUM	?
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPAC	ITY SI	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA'	Γ
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	)
PVVT	1.000	939.7	2.	0.0	00 15.0	000	0.857	-15.000	0.173	0.173	0.00	)
		DIVERSITY	POWER	FAN	STATIC	TOTAI	L MECH			MAX FAI	N MIN FAI	4
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	F EFF	FA	AN FAI	N RATIO	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC	(FRAC)	PLACEMEN	T CONTRO	L (FRAC	) (FRAC	)
SUPPLY	498.	1.00	0.094	0.58	0.0	0.50	0.00	DRAW-THE	RU CYCLING	G 1.00	0.3	)
ZONE		S	UPPLY EX	HAUST FLOW	M. FAN	INIMUM FLOW	OUTSIDE AIR FLOW		E: SENSIBLE	XTRACTION RATE	HEATING CAPACITY	ADDITION RATE ZONE
NAME		(		CFM )		(FRAC)	(CFM )	(KBTU/HR)				(KBTU/HR) MULT

Zn L27 N (T.NW37) APT1 498. 56. 0.011 1.000 0. 0.00 10.65 0.00 -17.64 1.

REPORT- SV	-A System	Design Para	meters for	L27 Sy	s1 (PVVT)	(T.NE38	)		WEATH	ER FILE- S	EATTLE BOE	EING FI WA	
		FLOOR		OUTSI	DE COOI	JING		HEATING	COOLING	HEATING	HEAT PUN	ИР	
SYSTEM	ALTITUDE	AREA	MAX	A Z	IR CAPAC	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA	ΑT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/	'HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HF	٤)	
PVVT	1.000	676.2	1.	0.0	00 6.	000	0.847	-6.700	0.173	0.173	0.00	00	
		DIVERSITY	POWER	FAN	STATIO	TOTA:	L MECH	I		MAX FAI	N MIN FA	ΛN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF:	F EFF	FA	AN FA	N RATIO	) RATI	0	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC	) (FRAC)	PLACEMEN	IT CONTRO	L (FRAC	) (FRAC	2)	
SUPPLY	193.	1.00	0.036	0.58	0.0	0.5	0.00	DRAW-THE	RU CYCLIN	IG 1.0	0.3	30	
		S	SUPPLY EX	HAUST	N	MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION	ſ
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT

REPORT- SV-A System Design Parameters for	L27 Sys1 (P	VVT) (T.NNE39)		WEATHER	FILE- S		BOEING	
FLOOR	OUTSIDE	COOLING	HEATING	COOLING	HEATING	HEAT	PUMP	

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPAC	ITY SE	ENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1195.4	2.	0.0	00 12.	000	0.838	-15.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTAL	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM)	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	421.	1.00	0.080	0.58	0.0	0.50	0.00	DRAW-THI	RU CYCLING	G 1.00	0.30	
		S	UPPLY EX	HAUST	М	INIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L27 N (T.NNE39) APT1 421. 72. 0.014 1.000 0. 0.00 0.00 9.02 0.00 -14.94 1.

REPORT- SV	-A System	Design Para	meters for	L27 Sys	s1 (PVVT)	T.S42)			WEATH	ER FILE- SE	ATTLE BOEIN	IG FI WA
		FLOOR		OUTSII	DE COOLI	NG		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	AI	R CAPACI	TY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RATI	O (KBTU/I	IR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	766.1	1.	0.00	00 9.0	000	0.881	-9.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF	F EFF	F	an fai	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F) (	IN-WATER)	(FRAC	) (FRAC)	PLACEME	NT CONTROL	L (FRAC)	(FRAC)	
SUPPLY	274.	1.00	0.052	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLING	J 1.00	0.30	
		S		HAUST		NIMUM	OUTSIDE			XTRACTION		ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(	CFM ) (C	CFM )	(KW)	FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (K	(BTU/HR) MULT

Zn L27 S (T.S42) APT1 274. 46. 0.009 1.000 0. 0.00 5.87 0.00 -9.72 1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.SE43) WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSII AI RATI	IR CAPACI	TY SI	ENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	898.6	2.	0.00	00 15.0	00	0.906	-15.000	0.173	0.173	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F) (	STATIC PRESSURE	TOTAI EFF (FRAC)	F EFF				RATIO	
SUPPLY	406.	1.00	0.077	0.58	0.0	0.50	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
ZONE NAME			FLOW	HAUST FLOW CFM )	FAN	NIMUM FLOW FRAC)	OUTSIDE AIR FLOW (CFM )		SENSIBLE		CAPACITY	ADDITION  RATE ZONE  KBTU/HR) MULT

Zn L27 S (T.SE43) APT1 406. 54. 0.011 1.000 0. 0.00 8.69 0.00 -14.39 1.

REPORT- SV	7-A System	Design Para	meters for	L27 Sy	s1 (PVVT)	4)		WEATH	ER FILE- SE	CATTLE BOEI	NG FI WA	
		FLOOR		OUTSI	DE COC	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	452.6	1.	0.0	00 9	.000	0.881	-9.000	0.173	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH	Į.		MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F.	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	(FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	274.	1.00	0.052	0.58	0.	0 0.5	0.00	DRAW-TH	RU CYCLIN	g 1.00	0.30	
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		( (	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

Zn L27 E (T.ENE44) APT1 274. 27. 0.005 1.000 0. 0.00 5.87 0.00 -9.72 1.

REPORT- SV-A System Design Parameters for	L28 Sys1 (1	PVVT) (G.SW5)	WEATHER FILE- SEATT	LE BOEING FI WA
FLOOR	OUTSIDE	COOLING	HEATING COOLING HEATING HE	AT PUMP

		FLOOR		OUTSI	DE CO	OOLING		HEATING	COOLING	HEATING	HEAT PUME	)
SYSTEM	ALTITUDE	AREA	MA	X P	AIR CAI	PACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	1
TYPE	FACTOR	(SQFT )	PEOPL	E RAT	TIO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1879.8	4	. 0.0	000 2	27.000	0.849	-33.000	0.172	0.173	0.000	1
		DIVERSITY	POWER	FAN	STAT	TIC TOTA	AL MECH	I		MAX FAN	MIN FAN	ſ
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSI	JRE EI	FF EFF	F	AN FA	N RATIC	) RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	ER) (FRAG	C) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	934.	1.00	0.177	0.58	(	0.0 0.	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	1
		S	UPPLY E	XHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L28 S	(G.SW5) APT	1	934.	113.	0.022	1.000	0.	0.00	0.00	19.99	0.00	-33.12 1.

REPORT- SV	7-A System	Design Parar	meters for	L28 Sy	s1 (PVVT)	(G.NE6)			WEATH	ER FILE- SE	ATTLE BOEIN	IG FI WA
		FLOOR		OUTSI	DE COOL	ING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPAC	ITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU/	HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1544.3	3.	0.0	00 21.	000	0.879	-21.000	0.172	0.173	0.000	
		DIVERSITY	POWER	FAN	STATIO	TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSURE	EF.	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	648.	1.00	0.122	0.58	0.0	0.5	0.00	DRAW-TH	RU CYCLIN	G 1.00	0.30	
ZONE		St	JPPLY EX	HAUST FLOW	FAN	IINIMUM FLOW	OUTSIDE			XTRACTION RATE	HEATING A	ADDITION RATE ZONE
NAME		((		CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)			CBTU/HR) MULT

Zn L28 N (G.NE6) APT1 648. 93. 0.018 1.000 0. 0.00 13.86 0.00 -22.95 1.

771.

96.

Zn L28 S (G.SSE9) APT1

0.019 1.000 0. 0.00 0.00 16.49 0.00 -27.32 1.

REPORT- SV-A System Design Parameters for L28 Sys1 (PVVT) (G.SSE9) WEATHER FILE- SEATTLE BOEING FI W										NG FI WA		
		FLOOR		OUTSI	DE COO	LING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	A	IR CAPA	CITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	IO (KBTU	/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1601.0	3.	0.0	00 24	.000	0.874	-30.000	0.172	0.173	0.000	
		DIVERSITY	POWER	FAN	STATI	C TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSUR	E EF	F EFF	F	AN FAI	N RATIO	RATIO	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATER	) (FRAC	) (FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	771.	1.00	0.146	0.58	0.	0 0.5	0 0.00	DRAW-TH	RU CYCLING	G 1.00	0.30	
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW				CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT

REPORT- SV-A System Design Parameters for L28 Sys1 (PVVT) (G.N10) WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSI A RAT	IR CAPACI	TY SE	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1631.5	3.	0.0	00 21.0	00	0.842	-24.000	0.172	0.173	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR	POWER DEMAND	FAN DELTA-T (F)	STATIC PRESSURE	TOTAL EFF	EFF	F	AN FAI			
SUPPLY	754.	(FRAC)	(KW) 0.142	0.58	(IN-WATER) 0.0	(FRAC)	(FRAC)					
		SI	JPPLY EXI	HAUST	MI	NIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING A	ADDITION

							_				
ZONE	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
NAME	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L28 N (G.N10) APT1	754.	98.	0.019	1.000	0.	0.00	0.00	16.13	0.00	-26.72	1.

REPORT- SV-A System Des:	ign Parameters for	L29 Sys1 (P	VVT) (G.SW5)		WEATHER	FILE- SE	ATTLE I	BOEING	 WA
	FLOOR	OUTSIDE	COOLING	HEATING C	OOLING	HEATING	HEAT	PIIMP	 

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE		IR CAPACI	TY SI	ENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUME SUPP-HEAT (KBTU/HR)	1
PVVT	1.000	1035.2	10.	0.0	00 30.0	00	0.872	-34.000	0.173	0.173	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F)	STATIC PRESSURE (IN-WATER)	TOTAI EFI (FRAC	F EFF				) RATIC	)
SUPPLY	885.	1.00	0.167	0.58	0.0	0.50	0.00	DRAW-THE	RU CONSTANT	r 1.00	0.30	
ZONE NAME			FLOW	HAUST FLOW CFM )	FAN	NIMUM FLOW FRAC)	OUTSIDE AIR FLOW (CFM )		SENSIBLE	KTRACTION RATE (KBTU/HR) (	CAPACITY	ADDITION  RATE ZONE  KBTU/HR) MULT

Zn L29 S (G.SW5) AMN 885. 0. 0.000 1.000 0. 0.00 18.93 0.00 -31.35 1.

REPORT- SV-A System Design Param	eters for L29 Sys1 (PVVT) (G.N9)
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					(							
		FLOOR		OUTSI	DE CO	OLING		HEATING	COOLING	HEATING	HEAT PUME	>
SYSTEM	ALTITUDE	AREA	MAX	P	AIR CAP	ACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	?
TYPE	FACTOR	(SQFT )	PEOPLE	RAT	CIO (KBT	U/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	674.1	22.	0.1	.39 2	4.000	0.722	-27.000	0.173	0.173	0.000	)
		DIVERSITY	POWER	FAN	STAT	IC TOTA	AL MECH	I		MAX FAN	MIN FAN	1
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE EF	FF EFF	F.	AN FA	N RATIO	RATIO	)
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	1215.	1.00	0.230	0.58	0	.0 0.5	0.00	DRAW-TH	RU CONSTAN	т 1.00	0.30	)
		S	UPPLY EX	HAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM ) (	CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
Zn L29 N (	G.N9) RST		1215.	2000.	0.880	1.000	169.	0.00	0.00	14.45	0.00	-31.88 1.

REPORT- SV-A System Design Parameters for Elec Room VRF

		FLOOR		OUTS	IDE C	OOLING		HEATING	COOLING	HEATING	HEAT PUM	1P	
SYSTEM	ALTITUDE	AREA		MAX .	AIR CA	PACITY S	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA	AΤ	
TYPE	FACTOR	(SQFT )	PEO	PLE RA	TIO (KB	TU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR	(3	
PVVT	1.000	2664.2		0. 0.	000 1	80.000	0.740	-7.437	0.173	0.370	0.00	00	
		DIVERSITY								MAX FA			
FAN	CAPACITY	FACTOR							AN F				
TYPE	(CFM )	(FRAC)	(KW	(F)	(IN-WAT	ER) (FRA	C) (FRAC	PLACEME	NT CONTRO	OL (FRAC	(FRAC	2)	
GIIDDI II	41.47	1 00	0 71			0 0 0	00 00	) DDALL MIT	D.: 01/01 T	70 1 0			
SUPPLY	4147.	1.00	0.71	.6 0.53	,	0.0 0.0	0.00	DRAW-TH	RU CYCLII	NG 1.0	0.3	30	
			SUPPLY	EXHAUST		MINIMUM	OUTSID	COOLING		EXTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLO			RATE	CAPACITY		ZONE
NAME			(CFM )	(CFM )	(KW)	(FRAC)		(KBTU/HR)			(KBTU/HR)	(KBTU/HR)	
INAME			(CFM )	(CFM )	(ICW)	(FRAC)	(CFM	(KBIU/HK)	(FRAC)	(KBIU/HK)	(KBIU/HK)	(KBIU/HK)	MOLI
Zn L5 C (0	G.C5) ELEC		167.	0.	0.000	1.000	0	0.00	0.00	4.43	0.00	-0.59	1.
Zn L4 C (0	G.C7) ELEC		164.	0.	0.000	1.000	0	0.00	0.00	4.36	0.00	-0.58	1.
Zn L6 N (0	G.N4) ELEC		163.	0.	0.000	1.000	0	0.00	0.00	4.33	0.00	-0.58	1.
Zn L7 N (0	G.N4) ELEC		161.	0.	0.000	1.000	0	0.00	0.00	4.26	0.00	-0.57	1.
Zn L8 N (1	4.N19) ELEC	!	164.	0.	0.000	1.000	0	0.00	0.00	4.35	0.00	-0.58	6.
Zn L14 N	(T.N34) ELE	C	171.	0.	0.000	1.000	0	0.00	0.00	4.53	0.00	-0.60	1.
Zn L15 N	(G.N4) ELEC	!	169.	0.	0.000	1.000	0	0.00	0.00	4.47	0.00	-0.60	1.
Zn L16 N	(G.N4) ELEC	!	163.	0.	0.000	1.000	0	0.00	0.00	4.33	0.00	-0.58	1.
Zn L17 N	(M.N19) ELE	C	166.	0.	0.000	1.000	0	0.00	0.00	4.41	0.00	-0.59	10.
Zn L27 N	(T.N34) ELE	C	171.	0.	0.000	1.000	0	0.00	0.00	4.54	0.00	-0.60	1.
Zn L28 N	(G.N4) ELEC	!	170.	0.	0.000	1.000	0	0.00	0.00	4.49	0.00	-0.60	1.

		FLOOR		OUTSI	DE (	COOLING		HEATING	COOLING	HEATING	HEAT PU	MP	
SYSTEM	ALTITUDE	AREA	. N	IAX A	IR CA	APACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEA	ΑT	
TYPE	FACTOR	(SQFT )	PEOF	LE RAT	'IO (KE	BTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HI	₹)	
PTAC	1.000	128764.8	1	0.0	00	0.000	0.000	0.000	0.166	0.000	0.00	00	
		DIVERSITY	POWEF	r FAN	STZ	ATIC TO	TAL MECI	ī		MAX FA	N MIN FA	ΔN	
FAN	CAPACITY	FACTOR			PRESS		EFF EFI		AN FA				
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WAT	TER) (FR	AC) (FRAC	PLACEME	NT CONTRO	OL (FRAC	(FRAC	2)	
SUPPLY	1743.	0.00	0.001	2.51		0.0 0	.00 0.00	) BLOW-TH	RU CYCLII	NG 0.0	0.0	00	
			SUPPLY	EXHAUST		MINIMU	M OUTSID	COOLING	I	EXTRACTION	HEATING	ADDITION	
ZONE			FLOW	FLOW	FAN	FLO			SENSIBLE	RATE	CAPACITY		ZONE
NAME			(CFM )	(CFM )	(KW)	(FRAC	) (CFM		(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L5 C (G	.C14) STO		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L16 C (	G.C15) STO		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L17 C (	M.C30) STO		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	10.
Zn L27 C (	T.C45) STO		10.	0.	0.008	1.00			0.60	0.36	-0.65	-0.68	1.
Zn L29 S (	G.SE7) RR		32.	0.	0.026	1.00	0 0	1.32	0.60	1.21	-2.07	-2.16	1.
Zn L1 N (G	.NW1) STR		49.	0.	0.040	1.00		1.99	0.60	1.84	-3.16	-3.30	1.
Zn L1 C (G			10.	0.	0.008	1.00			0.60	0.36	-0.65	-0.68	1.
Zn L1 C (G			10.	0.	0.008	1.00			0.60	0.36	-0.65	-0.68	1.
	3.WNW3) STR		37.	0.	0.030	1.00			0.60	1.33	-2.37	-2.37	1.
Zn P1 C (B	3.C5) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
	BB.WNW2) STF	2	32.	0.	0.026	1.00			0.60	1.15	-2.06	-2.06	1.
Zn P3 C (B			10.	0.	0.008	1.00			0.60	0.36	-0.65	-0.68	1.
	B.WNW11) ST	'R	31.	0.	0.025	1.00			0.60	1.13	-2.02	-2.02	1.
Zn P2 C (U			10.	0.	0.008	1.00			0.60	0.36	-0.65	-0.68	1.
Zn P4 W (B	3.WNW2) STR		28.	0.	0.023	1.00	0 0	1.14	0.60	1.03	-1.84	-1.84	1.
Zn L2 C (G	.C1) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L2 C (G	C4) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L3 C (G	.C1) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L3 C (G	C4) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L4 C (G	.C1) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L4 C (G	.C4) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L5 C (G	.C1) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L5 C (G	.C3) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L6 C (G	.C1) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L6 C (G	.C15) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L7 C (G	.C1) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L7 C (G	.C15) STR		10.	0.	0.008	1.00	0 0		0.60	0.36	-0.65	-0.68	1.
Zn L8 C (M	I.C16) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	6.
Zn L8 C (M			10.	0.	0.008	1.00			0.60	0.36	-0.65	-0.68	6.
Zn L14 C (	T.C31) STR		10.	0.	0.008	1.00	0 0	0.40	0.60	0.36	-0.65	-0.68	1.

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Zn L14 C (T.C45) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L15 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L15 C (G.C11) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L16 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L16 C (G.C11) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L17 C (M.C16) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	10.
Zn L17 C (M.C26) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	10.
Zn L27 C (T.C31) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L27 C (T.C41) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L28 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L28 C (G.C8) STR	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L29 W (G.WNW1) STR	39.	0.	0.032	1.000	0.	1.58	0.60	1.49	-2.55	-2.66	1.
Zn L29 E (G.E6) STR	71.	0.	0.058	1.000	0.	2.89	0.60	2.70	-4.62	-4.82	1.
Zn P1 W (B.W2) MECH	37.	0.	0.030	1.000	0.	1.49	0.60	1.35	-2.40	-2.41	1.
Zn P1 N (B.N4) MECH	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn P1 S (B.SE7) MECH	42.	0.	0.034	1.000	0.	1.66	0.60	1.50	-2.69	-2.69	1.
Zn P3 S (BB.SW1) MECH	47.	0.	0.038	1.000	0.	1.89	0.60	1.71	-3.05	-3.06	1.
Zn P2 S (UB.SW10) MECH	42.	0.	0.034	1.000	0.	1.67	0.60	1.51	-2.69	-2.69	1.
Zn P4 S (B.SW1) MECH	46.	0.	0.038	1.000	0.	1.86	0.60	1.68	-2.99	-3.00	1.
Zn L28 C (G.C11) MECH	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L29 N (G.NNW8) MECH	74.	0.	0.060	1.000	0.	3.00	0.60	2.80	-4.79	-5.00	1.
Zn P1 C (B.C10) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L4 C (G.C3) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L1 C (G.C9) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn P3 C (BB.C6) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn P2 C (UB.C15) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn P4 S (B.SSE5) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L2 C (G.C3) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L3 C (G.C3) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L5 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L6 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L7 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L8 C (M.C17) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	6.
Zn L14 C (T.C32) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L15 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L16 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L17 C (M.C17) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	10.
Zn L27 C (T.C32) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L28 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L29 S (G.S3) ELV	56.	0.	0.046	1.000	0.	2.30	0.60	2.13	-3.64	-3.80	1.
Zn P3 C (BB.C4) STO	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn P2 C (UB.C13) STO	10.	0.	0.008	1.000	0.	0.40	0.60	0.36	-0.65	-0.68	1.
Zn L1 C (G.C7) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L1 S (G.S12) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.

REPORT- SV-A System Design		Free	ze Protect					FILE- SEA			
Zn P1 C (B.C8) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
T. TO G (G GC) TROT	0		0.000	0.000	0	0.00	0.00	0.00	0.00	0.00	-
Zn L2 C (G.C6) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L3 C (G.C6) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L4 C (G.C5) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L5 C (G.C4) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L6 C (G.C3) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L7 C (G.C3) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L8 C (M.C18) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	6.
Zn L14 C (T.C33) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L15 C (G.C3) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L16 C (G.C3) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L17 C (M.C18) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	10.
Zn L27 C (T.C33) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L28 C (G.C3) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L29 C (G.C4) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L1 S (G.S13) ELEC	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P1 S (B.SW1) ELEC	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P1 S (B.S6) ELEC	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L1 S (G.SW3) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L1 S (G.S11) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L1 S (G.S19) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn Pl W (B.WSWll) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P1 N (B.NNE12) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P1 S (B.SE13) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P3 W (BB.W7) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P3 N (BB.NNE8) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P3 S (BB.SSE9) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P2 W (UB.W16) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P2 N (UB.NNE17) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P2 S (UB.SSE18) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P4 N (B.N6) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
ZII P4 N (B.N6) PAG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	Ι.
Zn L2 E (G.E5) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L2 S (G.SSW7) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L2 N (G.NNW8) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L3 E (G.E5) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L3 S (G.S7) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L3 N (G.NW8) PKG	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P4 N (B.NE3) STO	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
L30 Zn (G.1) MECH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn L1 N (G.NW15) VEST	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
211 21 14 (G.MMIS) VEDI	٠.	٠.	0.000	0.000	٠.	0.00	0.00	0.00	0.00	0.00	Ψ.

REPORT- SV	-A System	Design Param	meters for	SYS11 R	TL DOAS				WEATHE	ER FILE- SE	ATTLE BOEI	NG FI WA
		FLOOR		OUTSID				HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM TYPE	ALTITUDE FACTOR	AREA (SQFT )	MAX PEOPLE	AI: RATI			ENSIBLE (SHR)	CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1.0	0.	1.00	0 91.8	56	0.601	-100.210	0.241	0.221	0.000	
		DIVERSITY	POWER	FAN	STATIC	TOTAL				MAX FAN		
FAN TYPE	CAPACITY (CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F) (	PRESSURE IN-WATER)	EFI (FRAC			AN FAN NT CONTROI			
SUPPLY	1922.	1.00	1.559	2.51	0.0	0.00	0.00	DRAW-THI	RU CONSTANT	Γ 1.00	0.30	
		SU	JPPLY EXH	AUST	MI	NIMUM	OUTSIDE	COOLING	ΕΣ	KTRACTION	HEATING	ADDITION
ZONE NAME				FLOW FM )	FAN (KW) (I	FLOW FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)			CAPACITY KBTU/HR) (	RATE ZONE KBTU/HR) MULT

RTL DOAS DUMMY ZN 1922. 0. 0.000 1.000 1922. 0.00 0.00 20.76 0.00 -83.02 1.

REPORT-	SV-A	System	Design	Parameters	for	SYS11	Office	DOAS
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REPORT- SV-A System Design Parameters for SYS11 Office DOAS WEATHER FILE- SEATTLE BOEING FI WA												IG FI WA
SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSII AI RATI	IR CAPACI	ITY SE	NSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)	
PVVT	1.000	1.0	0.	1.00	00 68.4	163	0.601	-74.813	0.243	0.222	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY FACTOR (FRAC)	POWER DEMAND (KW)	FAN DELTA-T (F) (	STATIC PRESSURE IN-WATER)	TOTAL EFF (FRAC)	EFF	FA PLACEMEN				
SUPPLY	1432.	1.00	1.162	2.51	0.0	0.00	0.00	DRAW-THR	U CONSTANT	1.00	0.30	
ZONE NAME			FLOW	AUST FLOW FM )	FAN	INIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )		SENSIBLE		CAPACITY	ADDITION RATE ZONE

OFF DOAS DUMMY ZN 1432. 0. 0.000 1.000 1432. 0.00 0.00 15.47 0.00 -61.87 1.

REPORT- SV-A System Design Parameters for	L15 Amenity ERV	WEATHER FILE- SEATTLE BOEING FI WA

		FLOOR		OUTSI	DE CO	 OLING		HEATING	COOLING	HEATING	HEAT PUMP	
SYSTEM	ALTITUDE	AREA	MAX	ζ <i>P</i>	IR CAP	ACITY S	ENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
TYPE	FACTOR	(SQFT )	PEOPLE	E RAT	IO (KBT	J/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1.0	0 .	. 1.0	100 43	3.021	0.601	-46.611	0.200	0.184	0.000	
		DIVERSITY	POWER	FAN	STAT	IC TOTA	L MECH			MAX FAN	MIN FAN	
FAN	CAPACITY	FACTOR	DEMAND	DELTA-T	PRESSU	RE EF	F EFF	F	AN FA	N RATIC	RATIC	
TYPE	(CFM )	(FRAC)	(KW)	(F)	(IN-WATE	R) (FRAC	(FRAC)	PLACEME	NT CONTRO	L (FRAC)	(FRAC)	
SUPPLY	900.	1.00	1.041	3.58	0	.0 0.0	0.00	DRAW-THI	RU CONSTAN	т 1.00	0.30	
		s	UPPLY EX	KHAUST		MINIMUM	OUTSIDE	COOLING	E	XTRACTION	HEATING	ADDITION
ZONE			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE ZONE
NAME		(	CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR) (	KBTU/HR) (	KBTU/HR) MULT
L15 ERV DU	JMMY ZN		900.	0.	0.000	1.000	900.	0.00	0.00	9.72	0.00	-38.88 1.