

REPORT- SV-A System Design Parameters for

RTU-1 (Corridor DOAS) SYS6

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	20477.3	0.	1.000	341.777	0.601	-330.577	0.211	0.218	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	7150.	1.00	5.468	2.36	0.0	0.00	0.00	DRAW-THRU	CONSTANT	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L5 W (G.W12) COR		303.	0.	0.000	1.000	303.	0.00	0.00	7.53	0.00	-13.10	1.
Zn L6 C (G.C14) COR		276.	0.	0.000	1.000	276.	0.00	0.00	6.85	0.00	-11.91	1.
Zn L7 C (G.C14) COR		275.	0.	0.000	1.000	275.	0.00	0.00	6.84	0.00	-11.89	1.
Zn L15 C (G.C10) COR		544.	0.	0.000	1.000	544.	0.00	0.00	13.52	0.00	-23.52	1.
Zn L17 C (M.C25) COR		214.	0.	0.000	1.000	214.	0.00	0.00	5.31	0.00	-9.24	10.
Zn L28 C (G.C7) COR		233.	0.	0.000	1.000	233.	0.00	0.00	5.80	0.00	-10.08	1.
Zn L29 E (G.ENE2) COR		638.	0.	0.000	1.000	638.	0.00	0.00	15.84	0.00	-34.44	1.
Zn L5 C (G.C13) COR		360.	0.	0.000	1.000	360.	0.00	0.00	8.94	0.00	-15.55	1.
Zn L8 C (M.C29) COR		275.	0.	0.000	1.000	275.	0.00	0.00	6.84	0.00	-11.90	6.
Zn L14 C (T.C44) COR		295.	0.	0.000	1.000	295.	0.00	0.00	7.34	0.00	-12.76	1.
Zn L16 C (G.C10) COR		214.	0.	0.000	1.000	214.	0.00	0.00	5.31	0.00	-9.24	1.
Zn L27 C (T.C40) COR		219.	0.	0.000	1.000	219.	0.00	0.00	5.44	0.00	-9.47	1.

REPORT- SV-A System Design Parameters forSF-L4-1 (COR DOAS)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	2956.7	0.	1.000	73.356	0.634	-69.301	0.269	0.285	-146.142

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	1650.	1.00	1.338	2.51	0.0	0.00	0.00	DRAW-THRU	CONSTANT	1.00	0.30

ZONE	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
SF-L4 DUMMY ZN	37.	0.	0.000	1.000	37.	0.00	0.00	0.40	0.00	-1.59	1.
Zn P1 C (B.C9) COR	149.	0.	0.000	1.000	149.	0.00	0.00	3.71	0.00	-6.45	1.
Zn P2 C (UB.C14) COR	134.	0.	0.000	1.000	134.	0.00	0.00	3.34	0.00	-5.81	1.
Zn L1 C (G.C8) COR	235.	0.	0.000	1.000	235.	0.00	0.00	5.84	0.00	-10.15	1.
Zn L1 C (G.C10) COR	96.	0.	0.000	1.000	96.	0.00	0.00	2.40	0.00	-4.17	1.
Zn L1 S (G.S16) COR	149.	0.	0.000	1.000	149.	0.00	0.00	3.71	0.00	-6.45	1.
Zn P3 C (BB.C5) COR	134.	0.	0.000	1.000	134.	0.00	0.00	3.33	0.00	-5.80	1.
Zn P4 C (B.C4) COR	115.	0.	0.000	1.000	115.	0.00	0.00	2.86	0.00	-4.98	1.
Zn L2 C (G.C2) COR	185.	0.	0.000	1.000	185.	0.00	0.00	4.59	0.00	-7.98	1.
Zn L3 C (G.C2) COR	191.	0.	0.000	1.000	191.	0.00	0.00	4.74	0.00	-8.25	1.
Zn L4 C (G.C2) COR	223.	0.	0.000	1.000	223.	0.00	0.00	5.55	0.00	-9.64	1.

REPORT- SV-A System Design Parameters for

L1 Retail Split System N

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	2831.6	47.	0.000	38.071	0.775	-38.417	0.261	0.259	-9.815

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	1474.	1.00	0.433	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L1 N (G.NNW2) RTL		1474.	0.	0.000	0.000	0.	0.00	0.00	31.85	0.00	-10.15	1.

REPORT- SV-A System Design Parameters forL1 Sys1 (PVVT) (G.N14)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	2636.9	85.	0.000	72.000	0.758	-74.488	0.225	0.217	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	2637.	1.00	0.774	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L1 C (G.C4) LOB		250.	0.	0.000	1.000	0.	0.00	0.00	4.62	0.00	-8.92	1.
Zn L1 N (G.N14) LOB		2302.	0.	0.000	1.000	0.	0.00	0.00	42.53	0.00	-82.05	1.
Zn L1 C (G.C5) RR		84.	0.	0.000	1.000	0.	0.00	0.00	2.91	0.00	-3.65	1.

REPORT- SV-A System Design Parameters for

L1 Retail Split System S

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	5434.4	91.	0.000	84.599	0.782	-80.480	0.268	0.281	-32.024

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	3328.	1.00	0.998	0.93	0.0	0.00	0.00	DRAW-THRU	SPEED	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L1 E (G.ENE18) RTL		2958.	0.	0.000	0.000	0.	0.00	0.00	63.90	0.00	-19.95	1.
Zn L2 N (G.NE9) RTL		144.	0.	0.000	1.000	0.	0.00	0.00	3.12	0.00	-5.15	1.
Zn L2 S (G.SE10) RTL		225.	0.	0.000	1.000	0.	0.00	0.00	4.87	0.00	-8.03	1.

REPORT- SV-A System Design Parameters for

L3 Ops Office Elec Heat

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PTAC	1.000	812.1	3.	0.000	0.000	0.000	0.000	0.261	0.259	-1.929

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	69.	0.00	0.001	2.51	0.0	0.00	0.00	BLOW-THRU	CYCLING	0.00	0.00

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L3 S (G.S9) OFF		59.	0.	0.048	1.000	0.	2.82	0.63	2.56	-2.84	-2.09	1.
Zn L3 C (G.C10) STO		10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.C6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR	MAX PEOPLE	OUTSIDE	COOLING	SENSIBLE (SHR)	HEATING	COOLING	HEATING	HEAT PUMP
		AREA (SQFT )		AIR RATIO	CAPACITY (KBTU/HR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)
PVVT	1.000	562.9	4.	0.000	6.158	0.803	-5.927	0.211	0.219	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	223.	1.00	0.067	0.93	0.0	0.00	0.00	DRAW-THRU	CYCLING	1.00	0.30

ZONE	SUPPLY FLOW	EXHAUST FLOW	FAN	MINIMUM FLOW	OUTSIDE AIR FLOW	COOLING CAPACITY	EXTRACTION SENSIBLE	HEATING CAPACITY	ADDITION RATE	ZONE	
NAME	( CFM )	( CFM )	( KW )	( FRAC )	( CFM )	( KBTU/HR )	( FRAC )	( KBTU/HR )	( KBTU/HR )	MULT	
Zn L4 C (G.C6) RR	223.	0.	0.000	1.000	0.	0.00	0.00	4.81	0.00	-7.93	1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.W8)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1197.3	8.	0.000	38.225	0.843		-39.568	0.225	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		1474.	1.00	0.432	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L4 W (G.W8) OFF			1474.	0.	0.000	1.000	0.	0.00	0.00	31.84	0.00	-52.53	1.



REPORT- SV-A System Design Parameters forL4 Sys1 (PVVT) (G.S9)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	2458.5	17.	0.000	39.402	0.816	-40.772	0.225	0.218	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	1456.	1.00	0.427	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L4 S (G.S9) OFF		1456.	0.	0.000	1.000	0.	0.00	0.00	31.45	0.00	-51.89	1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.E10)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1197.7	8.	0.000	26.377	0.825		-27.339	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		988.	1.00	0.290	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L4 E (G.E10) OFF			988.	0.	0.000	1.000	0.	0.00	0.00	21.35	0.00	-35.23	1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.N11)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	2234.4	16.	0.000	32.690	0.813		-33.867	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		1201.	1.00	0.352	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L4 N (G.N11) OFF			1201.	0.	0.000	1.000	0.	0.00	0.00	25.94	0.00	-42.81	1.

REPORT- SV-A System Design Parameters forL4 Sys1 (PVVT) (G.C12)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	5388.9	38.	0.000	55.517	0.801	-57.400	0.225	0.217	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	1999.	1.00	0.587	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L4 C (G.C12) OFF		1999.	0.	0.000	1.000	0.	0.00	0.00	43.17	0.00	-71.24	1.

REPORT- SV-A System Design Parameters for L4 Sys1 (PVVT) (G.C13)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	3915.1	27.	0.000	41.482	0.802		-42.944	0.225	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		1497.	1.00	0.439	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L4 C (G.C13) OFF			1497.	0.	0.000	1.000	0.	0.00	0.00	32.33	0.00	-53.35	1.

REPORT- SV-A System Design Parameters for L5 Sys1 (PVVT) (G.W6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1411.5	3.	0.000	18.430	0.834		-17.737	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		700.	1.00	0.205	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L5 W (G.W6)	APT1		700.	85.	0.061	1.000	0.	0.00	0.00	15.13	0.00	-24.96	1.

REPORT- SV-A System Design Parameters for L5 Sys1 (PVVT) (G.S7)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	4144.8	8.	0.000	22.549	0.838		-21.697	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		862.	1.00	0.253	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L5 S (G.S7) APT3			862.	249.	0.178	1.000	0.	0.00	0.00	18.63	0.00	-30.74	1.

REPORT- SV-A System Design Parameters for L5 Sys1 (PVVT) (G.ESE8)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1518.1	3.	0.000	16.792	0.843	-15.149	0.197	0.218	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		648.	1.00	0.190	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L5 E (G.ESE8) APT1		648.		91.	0.065	1.000	0.	0.00	0.00	13.99	0.00	-23.08	1.



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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1445.8	3.	0.000	9.329	0.839		-8.975	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		357.	1.00	0.105	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L5 E	(G.ENE9) APT1		357.	87.	0.062	1.000	0.	0.00	0.00	7.72	0.00	-12.74	1.

REPORT- SV-A System Design Parameters for L5 Sys1 (PVVT) (G.W10)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1353.9	3.	0.000	18.619	0.835	-17.918	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		709.	1.00	0.208	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L5 W (G.W10)	APT1		709.	81.	0.058	1.000	0.	0.00	0.00	15.30	0.00	-25.25	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	3993.7	7.	0.000	22.723	0.816		-21.868	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		839.	1.00	0.246	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L5 N (G.N11) APT3		839.		240.	0.172	1.000	0.	0.00	0.00	18.13	0.00	-29.92	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	956.7	2.	0.000	13.378	0.835		-12.865	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		510.	1.00	0.150	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 W (G.WSW5) APT1			510.	58.	0.041	1.000	0.	0.00	0.00	11.01	0.00	-18.17	1.

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.S6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)		CAPACITY	EIR	EIR	SUPP-HEAT
			(SQFT )		RATIO	(KBTU/HR)			(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT		1.000	2069.4	4.	0.000	15.784	0.841		-15.190	0.211	0.219	0.000
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		607.	1.00	0.178	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME		FLOW		FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )		(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L6 S (G.S6) APT3		607.		124.	0.089	1.000	0.	0.00	0.00	13.11	0.00	-21.63
												1.

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.ESE7)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1233.6	2.	0.000	10.359	0.841	-9.964	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		398.	1.00	0.117	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 E (G.ESE7) APT1			398.	74.	0.053	1.000	0.	0.00	0.00	8.61	0.00	-14.20	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	640.8	1.	0.000	8.385	0.839	-8.068	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		321.	1.00	0.094	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 W (G.W8) APT1			321.	39.	0.028	1.000	0.	0.00	0.00	6.93	0.00	-11.44	1.

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.NW9)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	925.4	2.	0.000	11.742	0.834	-11.296	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		446.	1.00	0.131	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 N (G.NW9) APT1			446.	56.	0.040	1.000	0.	0.00	0.00	9.64	0.00	-15.91	1.



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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	749.0	1.	0.000	4.539	0.818		-4.370	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		168.	1.00	0.049	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 N (G.NE10) APT1			168.	45.	0.032	1.000	0.	0.00	0.00	3.63	0.00	-5.99	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	711.4	1.	0.000	5.302	0.823	-5.104	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		198.	1.00	0.058	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 N (G.NW11)		APT1	198.	43.	0.031	1.000	0.	0.00	0.00	4.28	0.00	-7.06	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1265.9	2.	0.000	7.012	0.838		-6.747	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		268.	1.00	0.079	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 N (G.NE12) APT1			268.	76.	0.054	1.000	0.	0.00	0.00	5.79	0.00	-9.55	1.

REPORT- SV-A System Design Parameters for L6 Sys1 (PVVT) (G.ESE13)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	679.6	1.	0.000	3.316	0.829		-3.192	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		125.	1.00	0.037	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L6 E (G.ESE13) APT1			125.	41.	0.029	1.000	0.	0.00	0.00	2.70	0.00	-4.46	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	956.7	2.	0.000	13.339	0.835		-12.828	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		508.	1.00	0.149	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L7 W (G.WSW5) APT1		508.		58.	0.041	1.000	0.	0.00	0.00	10.98	0.00	-18.11	1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.S6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)		CAPACITY	EIR	EIR	SUPP-HEAT
			(SQFT )		RATIO	(KBTU/HR)			(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT		1.000	2069.4	4.	0.000	15.934	0.841		-15.335	0.211	0.219	0.000
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		613.	1.00	0.180	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME		FLOW		FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )		(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L7 S (G.S6) APT3		613.		124.	0.089	1.000	0.	0.00	0.00	13.24	0.00	-21.84
												1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.ESE7)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1233.6	2.	0.000	10.090	0.841	-9.705	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		388.	1.00	0.114	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L7 E (G.ESE7)		APT1	388.	74.	0.053	1.000	0.	0.00	0.00	8.38	0.00	-13.83	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	640.8	1.	0.000	7.853	0.834	-7.556	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		298.	1.00	0.088	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L7 W (G.W8)	APT1		298.	39.	0.028	1.000	0.	0.00	0.00	6.44	0.00	-10.63	1.



REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.NW9)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		FLOOR AREA	MAX	OUTSIDE AIR	COOLING CAPACITY	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMP SUPP-HEAT	
TYPE	ALTITUDE FACTOR	(SQFT )	PEOPLE	RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	938.6	2.	0.000	12.008	0.834	-11.551	0.210	0.219	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)
SUPPLY	456.	1.00	0.134	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE NAME	SUPPLY FLOW (CFM )		EXHAUST FLOW (CFM )	FAN FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	EXTRACTION SENSIBLE (FRAC)	HEATING RATE (KBTU/HR)	ADDITION CAPACITY (KBTU/HR)	ZONE MULT
Zn L7 N (G.NW9) APT1	456.		56.	0.040	1.000	0.	0.00	0.00	9.86	0.00	-16.27 1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.NE10)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	681.8	1.	0.000	4.566	0.820		-4.395	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		170.	1.00	0.050	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L7 N (G.NE10) APT1			170.	41.	0.029	1.000	0.	0.00	0.00	3.67	0.00	-6.05	1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.NW11)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	711.4	1.	0.000	5.323	0.823	-5.124	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		199.	1.00	0.058	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L7 N (G.NW11)		APT1	199.	43.	0.031	1.000	0.	0.00	0.00	4.30	0.00	-7.09	1.

REPORT- SV-A System Design Parameters for L7 Sys1 (PVVT) (G.NE12)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1265.9	2.	0.000	7.856	0.839		-7.559	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		301.	1.00	0.088	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L7 N	(G.NE12) APT1		301.	76.	0.054	1.000	0.	0.00	0.00	6.50	0.00	-10.72	1.

REPORT- SV-A System Design Parameters for

L7 Sys1 (PVVT) (G.ESE13)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	679.6	1.	0.000	3.149	0.835	-3.031	0.211	0.219	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	120.	1.00	0.035	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L7 E (G.ESE13) APT1		120.	41.	0.029	1.000	0.	0.00	0.00	2.59	0.00	-4.28	1.

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.WSW20)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
			(SQFT )		RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT		1.000	5740.4	11.	0.000	88.026	0.840	-84.636	0.210	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		3379.	1.00	0.991	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME		FLOW		FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )		(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L8 W (M.WSW20) APT1		563.		58.	0.041	1.000	0.	0.00	0.00	12.16	0.00	-20.07
												6.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	12416.1	23.	0.000	109.344	0.842		-105.225	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		4212.	1.00	1.236	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L8 S (M.S21) APT3		702.		124.	0.089	1.000	0.	0.00	0.00	15.16	0.00	-25.02	6.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	7401.4	14.	0.000	71.850	0.842	-69.097	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		2768.	1.00	0.812	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L8 E (M.ESE22) APT1			461.	74.	0.053	1.000	0.	0.00	0.00	9.96	0.00	-16.44	6.



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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	3844.9	7.	0.000	52.102	0.839	-50.129	0.210	0.219	0.000		
FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN		
TYPE	(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)		
SUPPLY		1996.	1.00	0.586	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L8 W (M.W23) APT1			333.	39.	0.028	1.000	0.	0.00	0.00	7.19	0.00	-11.86	6.

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.NW24)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	5631.6	11.	0.000	80.089	0.836	-77.031	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		3052.	1.00	0.896	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L8 N (M.NW24) APT1			509.	56.	0.040	1.000	0.	0.00	0.00	10.99	0.00	-18.13	6.

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.NE25)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	4090.5	8.	0.000	32.561	0.836	-31.340	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		1241.	1.00	0.364	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L8 N (M.NE25) APT1			207.	41.	0.029	1.000	0.	0.00	0.00	4.47	0.00	-7.37	6.

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.NW26)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT		
			(SQFT )		RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)		
PVVT		1.000	4268.2	8.	0.000	41.553	0.839	-39.986	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO	
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)	
SUPPLY		1592.	1.00	0.467	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	
			(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	
												ZONE	
												MULT	
Zn L8 N (M.NW26) APT1			265.	43.	0.031	1.000	0.	0.00	0.00	5.73	0.00	-9.45	6.

REPORT- SV-A System Design Parameters for

L8 Sys1 (PVVT) (M.NE27)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)			
PVVT	1.000	7595.5	14.	0.000	57.511	0.841	-55.325	0.210	0.219	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)		
SUPPLY	2209.	1.00	0.648	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30		
ZONE NAME			SUPPLY FLOW (CFM )	EXHAUST FLOW (CFM )	FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	ZONE MULT
Zn L8 N (M.NE27) APT1			368.	76.	0.054	1.000	0.	0.00	0.00	7.95	0.00	-13.12	6.

REPORT- SV-A System Design Parameters for L8 Sys1 (PVVT) (M.ESE28)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	4077.3	8.	0.000	24.620	0.839	-23.698	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		943.	1.00	0.277	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L8 E (M.ESE28) APT1			157.	41.	0.029	1.000	0.	0.00	0.00	3.39	0.00	-5.60	6.

REPORT- SV-A System Design Parameters for

L14 Syst (PVVT) (T.WSW35)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (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	16.279	0.841	-14.686	0.197	0.218	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)	
SUPPLY	626.	1.00	0.184	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE NAME		SUPPLY FLOW (CFM )	EXHAUST FLOW (CFM )	FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	ZONE MULT
Zn L14 W (T.WSW35) APT1		626.	58.	0.041	1.000	0.	0.00	0.00	13.51	0.00	-22.30	1.

REPORT- SV-A System Design Parameters forL14 Syst (PVVT) (T.S36)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	2069.4	4.	0.000	21.559	0.843	-20.744	0.210	0.219	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	832.	1.00	0.244	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L14 S (T.S36) APT3		832.	124.	0.089	1.000	0.	0.00	0.00	17.97	0.00	-29.65	1.



REPORT- SV-A System Design Parameters for

L14 Syst (PVVT) (T.ESE37)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)		
PVVT	1.000	1233.6	2.	0.000	16.585	0.844	-14.962	0.197	0.218	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)	
SUPPLY	641.	1.00	0.188	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE NAME		SUPPLY FLOW (CFM )	EXHAUST FLOW (CFM )	FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	ZONE MULT
Zn L14 E (T.ESE37) APT1		641.	74.	0.053	1.000	0.	0.00	0.00	13.84	0.00	-22.84	1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.W38)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	640.8	1.	0.000	9.585	0.840	-9.221	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		368.	1.00	0.108	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L14 W (T.W38) APT1			368.	39.	0.028	1.000	0.	0.00	0.00	7.94	0.00	-13.11	1.

REPORT- SV-A System Design Parameters for

L14 Syst (PVVT) (T.NW39)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP		
		(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT	1.000	938.6	2.	0.000	14.461	0.837	-13.908	0.210	0.219	0.000		
FAN TYPE	CAPACITY (CFM )	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH	FAN	FAN	MAX FAN	MIN FAN	
		FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)			RATIO (FRAC)	RATIO (FRAC)	
SUPPLY	552.	1.00	0.162	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE NAME		SUPPLY	EXHAUST	FAN	MINIMUM	OUTSIDE	COOLING	SENSIBLE	EXTRACTION	HEATING	ADDITION	
		FLOW (CFM )	FLOW (CFM )		FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)		RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	MULT
Zn L14 N (T.NW39) APT1		552.	56.	0.040	1.000	0.	0.00	0.00	11.92	0.00	-19.67	1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.NE40)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	681.8	1.	0.000	5.202	0.823	-5.007	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		194.	1.00	0.057	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L14 N (T.NE40) APT1			194.	41.	0.029	1.000	0.	0.00	0.00	4.20	0.00	-6.93	1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.NW41)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	711.4	1.	0.000	6.339	0.827	-6.102	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		238.	1.00	0.070	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L14 N (T.NW41) APT1			238.	43.	0.031	1.000	0.	0.00	0.00	5.15	0.00	-8.50	1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.NE42)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1265.9	2.	0.000	14.252	0.840	-13.705	0.210	0.218	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		547.	1.00	0.161	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L14 N (T.NE42) APT1		547.		76.	0.054	1.000	0.	0.00	0.00	11.82	0.00	-19.50	1.

REPORT- SV-A System Design Parameters for L14 Sys1 (PVVT) (T.ESE43)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	679.6	1.	0.000	6.748	0.839		-6.494	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		259.	1.00	0.076	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L14 E (T.ESE43) APT1			259.	41.	0.029	1.000	0.	0.00	0.00	5.59	0.00	-9.22	1.

REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.SW5)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1302.8	2.	0.000	17.267	0.834		-15.576	0.197	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		657.	1.00	0.193	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L15 S (G.SW5) APT1			657.	78.	0.056	1.000	0.	0.00	0.00	14.18	0.00	-23.40	1.



REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.W6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	640.8	1.	0.000	8.785	0.835	-8.452	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		334.	1.00	0.098	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L15 W (G.W6) APT1			334.	39.	0.028	1.000	0.	0.00	0.00	7.22	0.00	-11.92	1.

REPORT- SV-A System Design Parameters for

L15 Syst (PVVT) (G.NW7)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA	MAX	OUTSIDE	COOLING			HEATING	COOLING	HEATING	HEAT PUMP	
		(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT	1.000	937.6	2.	0.000	13.241	0.835		-12.736	0.210	0.219	0.000	
FAN TYPE	CAPACITY (CFM )	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
		FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY	504.	1.00	0.148	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE NAME		SUPPLY	EXHAUST			MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
		FLOW (CFM )	FLOW (CFM )	FAN	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	MULT
Zn L15 N (G.NW7) APT1		504.	56.	0.040	1.000	0.	0.00	0.00	0.00	10.89	0.00	-17.97

REPORT- SV-A System Design Parameters for L15 Sys1 (PVVT) (G.NE8)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	543.9	5.	1.000	14.340	0.601		-13.791	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		300.	1.00	0.090	0.93	0.0	0.50	0.00	DRAW-THRU	CONSTANT	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L15 N (G.NE8) AMN		300.		0.	0.000	1.000	300.	0.00	0.00	6.48	0.00	-10.69	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1484.8	15.	0.391	26.896	0.686	-27.876	0.226	0.218	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		767.	1.00	0.225	0.91	1.2	0.50	0.62	DRAW-THRU	CONSTANT	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L15 N (G.NE9) AMN		767.		0.	0.000	1.000	300.	0.00	0.00	16.57	0.00	-27.34	1.

REPORT- SV-A System Design Parameters for L15 Sys1 (PWVT) (G.SSE12)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1375.0	14.	0.382	27.648	0.685		-28.653	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		786.	1.00	0.230	0.91	1.2	0.50	0.62	DRAW-THRU	CONSTANT	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L15 S (G.SSE12) FIT		786.		0.	0.000	1.000	300.	0.00	0.00	16.97	0.00	-28.00	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1361.3	3.	0.000	16.791	0.834		-15.148	0.197	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		638.	1.00	0.187	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L16 S (G.SW5) APT1			638.	82.	0.058	1.000	0.	0.00	0.00	13.78	0.00	-22.73	1.

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.W6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	640.8	1.	0.000	8.086	0.834	-7.781	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		307.	1.00	0.090	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L16 W (G.W6) APT1			307.	39.	0.028	1.000	0.	0.00	0.00	6.64	0.00	-10.95	1.

REPORT- SV-A System Design Parameters forL16 Syst (PVVT) (G.NW7)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	939.7	2.	0.000	12.453	0.834	-11.979	0.210	0.219	0.000

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	474.	1.00	0.139	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L16 N (G.NW7) APT1		474.	56.	0.040	1.000	0.	0.00	0.00	10.23	0.00	-16.88	1.



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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
			(SQFT )		RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT		1.000	676.2	1.	0.000	4.900	0.822	-4.717	0.211	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		183.	1.00	0.054	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
			(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L16 N (G.NE8) APT1			183.	41.	0.029	1.000	0.	0.00	0.00	3.95	0.00	-6.51
												1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1195.4	2.	0.000	11.439	0.828	-11.003	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		431.	1.00	0.126	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L16 N (G.NNE9) APT1		431.		72.	0.051	1.000	0.	0.00	0.00	9.31	0.00	-15.36	1.

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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	766.1	1.	0.000	6.896	0.842		-6.636	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		265.	1.00	0.078	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L16 S (G.S12) APT1			265.	46.	0.033	1.000	0.	0.00	0.00	5.73	0.00	-9.46	1.

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.SE13)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	898.6	2.	0.000	10.390	0.843	-9.993	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		401.	1.00	0.118	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L16 S (G.SE13) APT1			401.	54.	0.039	1.000	0.	0.00	0.00	8.66	0.00	-14.28	1.

REPORT- SV-A System Design Parameters for L16 Sys1 (PVVT) (G.ENE14)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	452.6	1.	0.000	7.068	0.842	-6.802	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		272.	1.00	0.080	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L16 E (G.ENE14) APT1		272.		27.	0.019	1.000	0.	0.00	0.00	5.88	0.00	-9.70	1.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.SW20)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	13613.1	26.	0.000	179.226	0.839		-185.908	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		6863.	1.00	2.014	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L17 S (M.SW20) APT1		686.		82.	0.058	1.000	0.	0.00	0.00	14.82	0.00	-24.46	10.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.W21)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	6408.2	12.	0.000	88.496	0.839	-85.144	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		3391.	1.00	0.995	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L17 W (M.W21) APT1		339.		39.	0.028	1.000	0.	0.00	0.00	7.32	0.00	-12.09	10.

REPORT- SV-A System Design Parameters for

L17 Syst (PVVT) (M.NW22)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)			
PVVT	1.000	9397.0	18.	0.000	137.044	0.836	-131.806	0.210	0.219	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)		
SUPPLY	5225.	1.00	1.533	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30		
ZONE NAME	SUPPLY FLOW (CFM )		EXHAUST FLOW (CFM )		FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	ZONE
													MULT
Zn L17 N (M.NW22) APT1	522.		56.		0.040	1.000	0.	0.00	0.00	11.29	0.00	-18.62	10.



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

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	6761.5	13.	0.000	63.333	0.841	-60.946	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		2435.	1.00	0.714	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L17 N (M.NE23) APT1		243.		41.	0.029	1.000	0.	0.00	0.00	5.26	0.00	-8.68	10.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.NNE24)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)		CAPACITY	EIR	EIR	SUPP-HEAT
			(SQFT )		RATIO	(KBTU/HR)			(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT		1.000	11953.6	22.	0.000	142.010	0.840		-136.559	0.210	0.219	0.000
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		5452.	1.00	1.600	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME		FLOW		FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )		(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L17 N (M.NNE24) APT1		545.		72.	0.051	1.000	0.	0.00	0.00	11.78	0.00	-19.43
												10.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.S27)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	7661.5	14.	0.000	75.587	0.843		-72.729	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		2913.	1.00	0.855	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L17 S (M.S27) APT1			291.	46.	0.033	1.000	0.	0.00	0.00	6.29	0.00	-10.38	10.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.SE28)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	8986.5	17.	0.000	114.035	0.844		-109.671	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		4402.	1.00	1.292	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L17 S (M.SE28) APT1			440.	54.	0.039	1.000	0.	0.00	0.00	9.51	0.00	-15.69	10.

REPORT- SV-A System Design Parameters for L17 Sys1 (PVVT) (M.ENE29)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)		CAPACITY	EIR	EIR	SUPP-HEAT
			(SQFT )		RATIO	(KBTU/HR)			(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT		1.000	4525.5	8.	0.000	79.788	0.843		-76.769	0.210	0.219	0.000
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		3075.	1.00	0.902	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME		FLOW		FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )		(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L17 E (M.ENE29) APT1		307.		27.	0.019	1.000	0.	0.00	0.00	6.64	0.00	-10.96
												10.

REPORT- SV-A System Design Parameters for

L27 Syst (PVVT) (T.SW35)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIR	COOLING CAPACITY	SENSIBLE (SHR)	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMP SUPP-HEAT			
		RATIO		(KBTU/HR)	(KBTU/HR)		(BTU/BTU)	(BTU/BTU)	(KBTU/HR)				
PVVT	1.000	1361.3	3.	0.000	18.748	0.839	-19.445	0.226	0.218	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)		
SUPPLY	718.	1.00	0.211	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30		
ZONE NAME	SUPPLY FLOW (CFM )		EXHAUST FLOW (CFM )		FAN (KW)	MINIMUM FLOW	OUTSIDE AIR FLOW	COOLING CAPACITY	SENSIBLE	EXTRACTION RATE	HEATING CAPACITY	ADDITION RATE	ZONE MULT
						(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	
Zn L27 S (T.SW35) APT1	718.		82.		0.058	1.000	0.	0.00	0.00	15.52	0.00	-25.60	1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.W36)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	640.8	1.	0.000	9.546	0.840	-9.184	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		366.	1.00	0.107	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L27 W (T.W36) APT1			366.	39.	0.028	1.000	0.	0.00	0.00	7.91	0.00	-13.05	1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.NW37)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP
TYPE		FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)		CAPACITY	EIR	EIR	SUPP-HEAT
			(SQFT )		RATIO	(KBTU/HR)			(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT		1.000	939.7	2.	0.000	14.727	0.837		-14.163	0.210	0.219	0.000
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
			(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY		562.	1.00	0.165	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME			FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
			(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
Zn L27 N (T.NW37) APT1			562.	56.	0.040	1.000	0.	0.00	0.00	12.15	0.00	-20.04
												1.



REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.NE38)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	676.2	1.	0.000	5.270	0.824	-5.072	0.211	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		197.	1.00	0.058	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L27 N (T.NE38) APT1			197.	41.	0.029	1.000	0.	0.00	0.00	4.26	0.00	-7.02	1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.NNE39)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	1195.4	2.	0.000	13.894	0.843	-13.360	0.210	0.218	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		535.	1.00	0.157	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L27 N (T.NNE39) APT1		535.		72.	0.051	1.000	0.	0.00	0.00	11.57	0.00	-19.08	1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.S42)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	766.1	1.	0.000	8.169	0.843		-7.860	0.210	0.219	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		315.	1.00	0.092	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L27 S (T.S42) APT1			315.	46.	0.033	1.000	0.	0.00	0.00	6.81	0.00	-11.23	1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.SE43)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	898.6	2.	0.000	12.860	0.844	-12.366	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		497.	1.00	0.146	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L27 S (T.SE43) APT1			497.	54.	0.039	1.000	0.	0.00	0.00	10.73	0.00	-17.71	1.

REPORT- SV-A System Design Parameters for L27 Sys1 (PVVT) (T.ENE44)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP		
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	(BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)		
PVVT		1.000	452.6	1.	0.000	8.917	0.843	-8.579	0.210	0.219	0.000		
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		344.	1.00	0.101	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L27 E (T.ENE44) APT1			344.	27.	0.019	1.000	0.	0.00	0.00	7.43	0.00	-12.26	1.

REPORT- SV-A System Design Parameters for

L28 Sys1 (PVVT) (G.SW5)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM TYPE	ALTITUDE FACTOR	FLOOR AREA (SQFT )	MAX PEOPLE	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	HEAT PUMP SUPP-HEAT (KBTU/HR)		
PVVT	1.000	1879.8	4.	0.000	26.184	0.835	-27.140	0.226	0.218	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)	
SUPPLY	997.	1.00	0.293	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE NAME		SUPPLY FLOW (CFM )	EXHAUST FLOW (CFM )	FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	ZONE MULT
Zn L28 S (G.SW5) APT1		997.	113.	0.081	1.000	0.	0.00	0.00	21.55	0.00	-35.55	1.

REPORT- SV-A System Design Parameters for L28 Sys1 (PVVT) (G.NE6)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	HEATING		COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1544.3	3.	0.000	19.989	0.843	-20.731	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)
SUPPLY		771.	1.00	0.226	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)
Zn L28 N (G.NE6) APT1			771.	93.	0.066	1.000	0.	0.00	0.00	16.66	0.00	-27.48
												1.

REPORT- SV-A System Design Parameters for L28 Sys1 (PVVT) (G.SSE9)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		FLOOR AREA	MAX	OUTSIDE AIR	COOLING CAPACITY	SENSIBLE	HEATING CAPACITY	COOLING EIR	HEATING EIR	HEAT PUMP SUPP-HEAT	
TYPE	ALTITUDE FACTOR	(SQFT )	PEOPLE	RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1601.0	3.	0.000	20.962	0.844	-21.735	0.226	0.218	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)	FAN PLACEMENT	FAN CONTROL	MAX FAN RATIO (FRAC)	MIN FAN RATIO (FRAC)
SUPPLY	810.	1.00	0.238	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30
ZONE NAME	SUPPLY FLOW (CFM )		EXHAUST FLOW (CFM )	FAN (KW)	MINIMUM FLOW (FRAC)	OUTSIDE AIR FLOW (CFM )	COOLING CAPACITY (KBTU/HR)	EXTRACTION SENSIBLE (FRAC)	HEATING RATE (KBTU/HR)	ADDITION CAPACITY (KBTU/HR)	ZONE MULT
Zn L2S S (G.SSE9) APT1	810.		96.	0.069	1.000	0.	0.00	0.00	17.49	0.00	-28.85 1.



REPORT- SV-A System Design Parameters for L28 Sys1 (PVVT) (G.N10)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1631.5	3.	0.000	20.190	0.833		-18.215	0.197	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		767.	1.00	0.225	0.91	1.2	0.50	0.62	DRAW-THRU	CYCLING	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L28 N (G.N10) APT1			767.	98.	0.070	1.000	0.	0.00	0.00	16.56	0.00	-27.33	1.

REPORT- SV-A System Design Parameters for L29 Sys1 (PVVT) (G.SW5)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	1035.2	10.	0.000	24.067	0.832		-24.930	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		912.	1.00	0.267	0.91	1.2	0.50	0.62	DRAW-THRU	CONSTANT	1.00	0.30	
ZONE		SUPPLY		EXHAUST	MINIMUM		OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME		FLOW (CFM )		FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn L29 S (G.SW5) AMN			912.	0.	0.000	1.000	0.	0.00	0.00	19.69	0.00	-32.49	1.

REPORT- SV-A System Design Parameters for L29 Sys1 (PVVT) (G.N9)

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM		ALTITUDE	FLOOR AREA	MAX	OUTSIDE	COOLING	SENSIBLE		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE		FACTOR	(SQFT )	PEOPLE	AIR RATIO	CAPACITY (KBTU/HR)	(SHR)		CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	SUPP-HEAT (KBTU/HR)	
PVVT		1.000	674.1	22.	0.000	34.163	0.809		-35.433	0.226	0.218	0.000	
FAN		CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN	
TYPE		(CFM )	FACTOR (FRAC)	DEMAND (KW)	DELTA-T (F)	PRESSURE (IN-WATER)	EFF (FRAC)	EFF (FRAC)	FAN PLACEMENT	FAN CONTROL	RATIO (FRAC)	RATIO (FRAC)	
SUPPLY		1248.	1.00	0.366	0.91	1.2	0.50	0.62	DRAW-THRU	CONSTANT	1.00	0.30	
ZONE			SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING	EXTRACTION		HEATING	ADDITION	
NAME			FLOW (CFM )	FLOW (CFM )	FAN (KW)	FLOW (FRAC)	AIR FLOW (CFM )	CAPACITY (KBTU/HR)	SENSIBLE (FRAC)	RATE (KBTU/HR)	CAPACITY (KBTU/HR)	RATE (KBTU/HR)	ZONE MULT
Zn	L29 N (G.N9) RST		1248.	2000.	0.880	1.000	0.	0.00	0.00	0.00	26.95	0.00	-44.46 1.

REPORT- SV-A System Design Parameters for Elec Room Sys6

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PVVT	1.000	2664.2	0.	0.000	117.570	0.733	-120.809	0.221	0.215	-261.284

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	4178.	1.00	3.273	2.42	0.0	0.00	0.00	DRAW-THRU	CYCLING	1.00	0.30

ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L5 C (G.C5) ELEC		167.	0.	0.000	0.000	0.	0.00	0.00	4.51	0.00	-0.00	1.
Zn L4 C (G.C7) ELEC		165.	0.	0.000	1.000	0.	0.00	0.00	4.44	0.00	-10.67	1.
Zn L6 N (G.N4) ELEC		165.	0.	0.000	1.000	0.	0.00	0.00	4.46	0.00	-10.71	1.
Zn L7 N (G.N4) ELEC		162.	0.	0.000	1.000	0.	0.00	0.00	4.38	0.00	-10.50	1.
Zn L8 N (M.N19) ELEC		165.	0.	0.000	1.000	0.	0.00	0.00	4.46	0.00	-10.71	6.
Zn L14 N (T.N34) ELEC		172.	0.	0.000	1.000	0.	0.00	0.00	4.65	0.00	-11.16	1.
Zn L15 N (G.N4) ELEC		171.	0.	0.000	1.000	0.	0.00	0.00	4.61	0.00	-11.07	1.
Zn L16 N (G.N4) ELEC		165.	0.	0.000	1.000	0.	0.00	0.00	4.45	0.00	-10.68	1.
Zn L17 N (M.N19) ELEC		168.	0.	0.000	1.000	0.	0.00	0.00	4.52	0.00	-10.86	10.
Zn L27 N (T.N34) ELEC		173.	0.	0.000	1.000	0.	0.00	0.00	4.67	0.00	-11.21	1.
Zn L28 N (G.N4) ELEC		172.	0.	0.000	1.000	0.	0.00	0.00	4.63	0.00	-11.12	1.

REPORT- SV-A System Design Parameters for

Freeze Protect

WEATHER FILE- SEATTLE BOEING FI WA

SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING	SENSIBLE	HEATING	COOLING	HEATING	HEAT PUMP
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	(SHR)	CAPACITY	EIR	EIR	SUPP-HEAT
		(SQFT )		RATIO	(KBTU/HR)		(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)
PTAC	1.000	128764.8	0.	0.000	0.000	0.000	0.000	0.261	0.259	-8.606

FAN	CAPACITY	DIVERSITY	POWER	FAN	STATIC	TOTAL	MECH			MAX FAN	MIN FAN
TYPE	(CFM )	FACTOR	DEMAND	DELTA-T	PRESSURE	EFF	EFF	FAN	FAN	RATIO	RATIO
		(FRAC)	(KW)	(F)	(IN-WATER)	(FRAC)	(FRAC)	PLACEMENT	CONTROL	(FRAC)	(FRAC)
SUPPLY	1699.	0.00	0.001	2.51	0.0	0.00	0.00	BLOW-THRU	CYCLING	0.00	0.00

ZONE	SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION	
NAME	FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE	ZONE
	(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)	MULT
Zn L5 C (G.C14) STO	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L16 C (G.C15) STO	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L17 C (M.C30) STO	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	10.
Zn L27 C (T.C45) STO	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L29 S (G.SE7) RR	46.	0.	0.037	1.000	0.	1.85	0.66	1.73	-1.87	-3.08	1.
Zn L1 N (G.NW1) STR	31.	0.	0.025	1.000	0.	1.23	0.66	1.15	-1.24	-2.06	1.
Zn L1 C (G.C6) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L1 C (G.C17) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P1 W (B.WNW3) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P1 C (B.C5) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P3 W (BB.WNW2) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P3 C (BB.C3) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P2 W (UB.WNW11) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P2 C (UB.C12) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn P4 W (B.WNW2) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L2 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L2 C (G.C4) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L3 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L3 C (G.C4) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L4 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L4 C (G.C4) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L5 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L5 C (G.C3) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L6 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L6 C (G.C15) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L7 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L7 C (G.C15) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.
Zn L8 C (M.C16) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	6.
Zn L8 C (M.C30) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	6.
Zn L14 C (T.C31) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.

REPORT- SV-A System Design Parameters for	Freeze Protect						WEATHER FILE- SEATTLE BOEING FI WA					
(CONTINUED)												
Zn L14 C (T.C45) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L15 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L15 C (G.C11) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L16 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L16 C (G.C11) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L17 C (M.C16) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	10.	
Zn L17 C (M.C26) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	10.	
Zn L27 C (T.C31) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L27 C (T.C41) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L28 C (G.C1) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L28 C (G.C8) STR	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L29 W (G.WNW1) STR	48.	0.	0.039	1.000	0.	1.93	0.66	1.82	-1.95	-3.25	1.	
Zn L29 E (G.E6) STR	115.	0.	0.093	1.000	0.	4.60	0.66	4.34	-4.64	-7.75	1.	
Zn P1 W (B.W2) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P1 N (B.N4) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P1 S (B.SE7) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P3 S (BB.SW1) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P2 S (UB.SW10) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P4 S (B.SW1) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L28 C (G.C11) MECH	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L29 N (G.NNW8) MECH	94.	0.	0.076	1.000	0.	3.77	0.66	3.55	-3.80	-6.34	1.	
Zn P1 C (B.C10) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L4 C (G.C3) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L1 C (G.C9) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P3 C (BB.C6) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P2 C (UB.C15) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn P4 S (B.SSE5) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L2 C (G.C3) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L3 C (G.C3) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L5 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L6 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L7 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L8 C (M.C17) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	6.	
Zn L14 C (T.C32) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L15 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L16 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L17 C (M.C17) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	10.	
Zn L27 C (T.C32) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L28 C (G.C2) ELV	10.	0.	0.008	1.000	0.	0.40	0.66	0.36	-0.40	-0.68	1.	
Zn L29 S (G.S3) ELV	73.	0.	0.059	1.000	0.	2.94	0.66	2.75	-2.97	-4.92	1.	
L30 Zn (G.1) MECH	133.	0.	0.108	1.000	0.	5.34	0.66	5.03	-5.39	-8.98	1.	
Zn L1 N (G.NW15) VEST	10.	0.	0.008	1.000	0.	0.41	0.65	0.36	-0.42	-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 Parameters for			Freeze Protect			WEATHER FILE- SEATTLE BOEING FI WA					
						(CONTINUED)					
Zn P1 C (B.C8) TRSH	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
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 P1 W (B.WSW11) 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.
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 P3 C (BB.C4) STO	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.
Zn P2 C (UB.C13) STO	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.

REPORT- SV-A System Design Parameters for				SYS11 RTL DOAS				WEATHER FILE- SEATTLE BOEING FI WA			
SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
		(SQFT )		RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1.0	0.	1.000	122.937	0.601	-126.697	0.223	0.216	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	2572.	1.00	2.085	2.51	0.0	0.00	0.00	DRAW-THRU	CONSTANT	1.00	0.30
ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
RTL DOAS DUMMY ZN		2572.	0.	0.000	1.000	2572.	0.00	0.00	27.78	0.00	-111.10



REPORT- SV-A System Design Parameters for				SYS11 Office DOAS				WEATHER FILE- SEATTLE BOEING FI WA			
SYSTEM	ALTITUDE	FLOOR	MAX	OUTSIDE	COOLING		HEATING	COOLING	HEATING	HEAT PUMP	
TYPE	FACTOR	AREA	PEOPLE	AIR	CAPACITY	SENSIBLE	CAPACITY	EIR	EIR	SUPP-HEAT	
		(SQFT )		RATIO	(KBTU/HR)	(SHR)	(KBTU/HR)	(BTU/BTU)	(BTU/BTU)	(KBTU/HR)	
PVVT	1.000	1.0	0.	1.000	68.463	0.601	-70.706	0.224	0.217	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	1432.	1.00	1.161	2.51	0.0	0.00	0.00	DRAW-THRU	CONSTANT	1.00	0.30
ZONE		SUPPLY	EXHAUST		MINIMUM	OUTSIDE	COOLING		EXTRACTION	HEATING	ADDITION
NAME		FLOW	FLOW	FAN	FLOW	AIR FLOW	CAPACITY	SENSIBLE	RATE	CAPACITY	RATE
		(CFM )	(CFM )	(KW)	(FRAC)	(CFM )	(KBTU/HR)	(FRAC)	(KBTU/HR)	(KBTU/HR)	(KBTU/HR)
OFF DOAS DUMMY ZN		1432.	0.	0.000	1.000	1432.	0.00	0.00	15.47	0.00	-61.87