



DEPT OF BLDGS 121185760 Job Number



ES133356210 Scan Code

1 DOE 2.1E

MANHATTAN WEST RESIDENTIAL, NYC

DOE-2.1E-121 Thu Feb 26 12:00:03 2015LDL RUN 1

ADSGN: Design Case

SIM: VIDARIS INC.

REPORT- LV-B SUMMARY OF SPACES OCCURRING IN THE PROJECT

WEATHER FILE- NEW YORK CITY TMY2

NUMBER OF SPACES 168 EXTERIOR 134 INTERIOR 34

SPACE	SPACE*FLOOR MULTIPLIER	SPACE TYPE	AZIMUTH	LIGHTING (WATT / SQFT)	PEOPLE	EQUIP (WATT / SQFT)	INFILTRATION METHOD	AIR CHANGES PER HOUR	AREA (SQFT)	VOLUME (CUFT)
SHAFT	1.0	EXT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	624.03	350765.31
C-BOH	1.0	INT	0.0	0.44	3.6	0.20	AIR-CHANGE	0.15	1089.01	14157.13
C-STORAGE	1.0	EXT	0.0	0.40	16.8	0.20	AIR-CHANGE	0.15	5037.51	65487.62
C-LOCKER	1.0	INT	0.0	0.49	2.0	0.50	AIR-CHANGE	0.15	587.42	7636.46
C-TELE	1.0	INT	0.0	0.52	0.2	0.20	AIR-CHANGE	0.15	230.48	2996.24
C-MECH	1.0	INT	0.0	0.58	4.6	0.20	AIR-CHANGE	0.15	4616.78	60018.14
C-OFC	1.0	INT	0.0	0.42	6.8	1.50	AIR-CHANGE	0.15	1021.10	13274.30
C-STAIR	1.0	INT	0.0	0.76	1.6	0.00	AIR-CHANGE	0.15	476.24	6191.12
C-ELEC	1.0	INT	0.0	0.52	2.3	0.20	AIR-CHANGE	0.15	2331.71	30312.23
C-CORR	1.0	INT	0.0	0.63	7.6	0.20	AIR-CHANGE	0.15	2272.65	29544.45
C-ELEV-LOBBY	1.0	INT	0.0	0.59	4.1	0.20	AIR-CHANGE	0.15	204.78	2662.14
C-TANK	1.0	INT	0.0	0.58	2.1	0.20	AIR-CHANGE	0.15	2092.35	27200.55
1-MOVE-IN	1.0	EXT	0.0	0.40	2.3	0.20	AIR-CHANGE	0.15	689.39	13098.41
1-BOH	1.0	EXT	0.0	0.44	13.9	0.20	AIR-CHANGE	0.15	4161.64	79071.16
1-RETAIL	1.0	EXT	0.0	1.50	56.2	0.50	AIR-CHANGE	0.15	2807.86	53349.34
1-LOBBY	1.0	EXT	0.0	0.59	35.7	0.20	AIR-CHANGE	0.15	1786.40	33941.60
1-PACKAGE	1.0	EXT	0.0	0.40	2.1	0.20	AIR-CHANGE	0.15	630.19	11973.61
1-CORR	1.0	EXT	0.0	0.63	4.0	0.20	AIR-CHANGE	0.15	1213.86	23063.34
1-VEST	1.0	EXT	0.0	0.70	0.3	0.20	AIR-CHANGE	0.30	79.63	1512.97
1-MAILRM	1.0	EXT	0.0	0.32	4.6	0.20	AIR-CHANGE	0.15	1385.26	26319.94
1-OFF	1.0	EXT	0.0	0.42	8.9	1.50	AIR-CHANGE	0.15	1340.00	25460.00
1-SECURITY	1.0	EXT	0.0	0.42	1.8	1.50	AIR-CHANGE	0.15	273.00	5187.00
1-STAIR	1.0	EXT	0.0	0.76	2.5	0.00	AIR-CHANGE	0.15	749.33	14237.27
1-SALLYPORT	1.0	EXT	0.0	0.42	4.4	1.50	AIR-CHANGE	0.50	660.00	12540.00
2-BASKETBALL	1.0	EXT	0.0	0.38	91.7	0.50	AIR-CHANGE	0.25	7333.67	117925.41
2-VEST	1.0	EXT	0.0	0.70	0.3	0.20	AIR-CHANGE	0.30	78.87	1268.23
2-AMENITY-S	1.0	EXT	0.0	0.40	12.3	0.50	AIR-CHANGE	0.25	986.01	15855.04
2-GYM-N	1.0	EXT	0.0	0.38	65.2	0.50	AIR-CHANGE	0.25	5215.09	172804.00
2-STORAGE-N	1.0	EXT	0.0	0.40	6.3	0.20	AIR-CHANGE	0.15	1896.63	67033.00
2-CORR	1.0	EXT	0.0	0.63	1.6	0.20	AIR-CHANGE	0.15	489.86	7876.95
2-GYM-S	1.0	EXT	0.0	0.38	81.7	0.50	AIR-CHANGE	0.25	6533.12	105052.57
2-STAIR	1.0	INT	0.0	0.76	2.0	0.00	AIR-CHANGE	0.15	595.24	9571.46
3-FITNESS	1.0	EXT	0.0	0.38	17.2	0.50	AIR-CHANGE	0.25	1379.34	23448.78
3-OFC	1.0	EXT	0.0	0.42	10.2	1.50	AIR-CHANGE	0.15	1526.03	25942.51
3-CORR	1.0	INT	0.0	0.63	3.9	0.20	AIR-CHANGE	0.15	1172.63	19934.71
3-TOILET	1.0	EXT	0.0	0.49	3.0	0.50	AIR-CHANGE	0.15	904.72	15380.24
3-MECH	1.0	EXT	0.0	0.58	2.9	0.20	AIR-CHANGE	0.15	2938.45	49953.65
3-LOUNGE	1.0	EXT	0.0	0.37	114.1	0.50	AIR-CHANGE	0.15	5704.50	96976.50

3-STORAGE	1.0	INT	0.0	0.40	0.6	0.20	AIR-CHANGE	0.15	166.03	2822.51
3-ELEV-LOBBY	1.0	INT	0.0	0.59	3.3	0.20	AIR-CHANGE	0.15	166.62	2832.54
3-PLENUM	1.0	INT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	409.61	6963.37
3-STAIR	1.0	INT	0.0	0.76	4.0	0.00	AIR-CHANGE	0.15	1204.17	20470.89
4-MECH-E	3.0	EXT	0.0	0.58	0.5	0.20	AIR-CHANGE	0.15	492.35	5199.22
4-MECH-W	3.0	EXT	0.0	0.58	1.4	0.20	AIR-CHANGE	0.15	1371.32	14481.14
4-MECH-N	3.0	EXT	0.0	0.58	1.1	0.20	AIR-CHANGE	0.15	1121.04	11838.18
4-AP-2B-SW	3.0	EXT	0.0	0.65	5.5	1.30	AIR-CHANGE	0.30	1090.91	11520.01
4-AP-0B-S	3.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	5328.05
1 DOE 2.1E MANHATTAN WEST RESIDENTIAL, NYC DOE-2.1E-121 Thu Feb 26 12:00:03 2015LDL RUN 1										
ADSGN: Design Case			SIM: VIDARIS INC.							
REPORT- LV-B	SUMMARY OF SPACES OCCURRING IN THE PROJECT						WEATHER FILE- NEW YORK CITY TMY2			
----- (CONTINUED) -----										
4-AP-1B-S	3.0	EXT	0.0	0.66	13.6	1.30	AIR-CHANGE	0.30	2725.40	28780.22
4-AP-1B-SE	3.0	EXT	0.0	0.66	3.9	1.30	AIR-CHANGE	0.30	774.47	8178.40
4-AP-1B-NE	3.0	EXT	0.0	0.66	3.9	1.30	AIR-CHANGE	0.30	774.47	8178.40
4-AP-1B-N	3.0	EXT	0.0	0.66	3.4	1.30	AIR-CHANGE	0.30	677.76	7157.15
4-AP-0B-N	3.0	EXT	0.0	0.66	6.6	1.30	AIR-CHANGE	0.30	1319.52	13934.13
4-STAIR	3.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.37	4301.83
4-CORR	3.0	INT	0.0	0.63	3.2	0.20	AIR-CHANGE	0.15	958.80	10124.93
7-AP-2B-SW	26.0	EXT	0.0	0.65	5.5	1.30	AIR-CHANGE	0.30	1090.91	10810.92
7-AP-0B-S	26.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	5000.09
7-AP-1B-S	26.0	EXT	0.0	0.66	13.6	1.30	AIR-CHANGE	0.30	2725.40	27008.71
7-AP-1B-SE	26.0	EXT	0.0	0.66	3.9	1.30	AIR-CHANGE	0.30	774.47	7675.00
7-AP-1B-NE	26.0	EXT	0.0	0.66	7.3	1.30	AIR-CHANGE	0.30	1458.29	14451.65
7-AP-1B-N	26.0	EXT	0.0	0.66	3.4	1.30	AIR-CHANGE	0.30	677.76	6716.60
7-AP-0B-N	26.0	EXT	0.0	0.66	6.6	1.30	AIR-CHANGE	0.30	1319.52	13076.44
7-AP-0B-E	26.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	5109.60
7-STAIR	26.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	4037.83
7-AP-1B-W	26.0	EXT	0.0	0.66	3.5	1.30	AIR-CHANGE	0.30	701.01	6946.91
7-AP-2B-NW	26.0	EXT	0.0	0.65	5.3	1.30	AIR-CHANGE	0.30	1060.27	10507.27
7-CORR	26.0	INT	0.0	0.63	3.3	0.20	AIR-CHANGE	0.15	981.76	9729.24
33-AP-2B-SW	1.0	EXT	0.0	0.65	5.5	1.30	AIR-CHANGE	0.30	1090.91	10723.65
33-AP-0B-S	1.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	4959.73
33-AP-1B-S	1.0	EXT	0.0	0.66	13.6	1.30	AIR-CHANGE	0.30	2725.40	26790.68
33-AP-1B-SE	1.0	EXT	0.0	0.66	3.9	1.30	AIR-CHANGE	0.30	774.47	7613.04
33-AP-1B-NE	1.0	EXT	0.0	0.66	7.3	1.30	AIR-CHANGE	0.30	1458.29	14334.99
33-AP-1B-N	1.0	EXT	0.0	0.66	3.4	1.30	AIR-CHANGE	0.30	677.76	6662.38
33-AP-0B-N	1.0	EXT	0.0	0.66	6.6	1.30	AIR-CHANGE	0.30	1319.52	12970.88
33-AP-0B-E	1.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	5068.35
33-STAIR	1.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	4005.23
33-AP-1B-W	1.0	EXT	0.0	0.66	3.5	1.30	AIR-CHANGE	0.30	701.01	6890.83
33-AP-2B-NW	1.0	EXT	0.0	0.65	5.3	1.30	AIR-CHANGE	0.30	1060.27	10422.45
33-CORR	1.0	EXT	0.0	0.63	3.3	0.20	AIR-CHANGE	0.15	981.76	9650.70
34-AP-3B-SE	1.0	EXT	0.0	0.70	7.2	1.30	AIR-CHANGE	0.30	1432.71	17192.52
34-MECH-NE	1.0	EXT	0.0	0.65	5.9	1.30	AIR-CHANGE	0.30	1188.92	14267.04
34-AP-2B-SW	1.0	EXT	0.0	0.65	5.5	1.30	AIR-CHANGE	0.30	1090.91	13090.92
34-AP-0B-S	1.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	6054.60
34-AP-1B-S	1.0	EXT	0.0	0.66	6.8	1.30	AIR-CHANGE	0.30	1350.59	16207.08
34-AP-0B-N	1.0	EXT	0.0	0.66	4.3	1.30	AIR-CHANGE	0.30	865.20	10382.40
34-MECH-E	1.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	6187.20
34-STAIR	1.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	4889.40

34-AP-1B-W	1.0	EXT	0.0	0.66	3.5	1.30	AIR-CHANGE	0.30	701.01	8412.12
34-AP-1B-NE	1.0	EXT	0.0	0.66	3.4	1.30	AIR-CHANGE	0.30	683.82	8205.84
34-MECH-NW	1.0	EXT	0.0	0.65	5.3	1.30	AIR-CHANGE	0.30	1060.27	12723.24
34-CORR	1.0	INT	0.0	0.63	3.0	0.20	AIR-CHANGE	0.15	902.11	10825.32
35-ELEC	1.0	EXT	0.0	0.67	0.5	5.00	AIR-CHANGE	0.15	472.98	4729.80
35-AP-1B-S	1.0	EXT	0.0	0.66	10.2	1.30	AIR-CHANGE	0.30	2045.60	20456.00
35-AP-1B-SE	1.0	EXT	0.0	0.66	3.7	1.30	AIR-CHANGE	0.30	737.65	7376.50
35-AP-1B-NE	1.0	EXT	0.0	0.66	7.5	1.30	AIR-CHANGE	0.30	1508.35	15083.50
35-TANK	1.0	EXT	0.0	0.58	0.8	0.20	AIR-CHANGE	0.15	757.10	7571.00
35-AP-2B-SW	1.0	EXT	0.0	0.65	5.5	1.30	AIR-CHANGE	0.30	1090.91	10909.10
35-AP-0B-S	1.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	5045.50
35-STAIR	1.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.82	4078.20
35-EMR	1.0	EXT	0.0	0.67	1.0	5.00	AIR-CHANGE	0.15	952.06	9520.60
35-CORR	1.0	INT	0.0	0.63	3.0	0.20	AIR-CHANGE	0.15	902.11	9021.10
35-AP-2B-NW	1.0	EXT	0.0	0.65	5.4	1.30	AIR-CHANGE	0.30	1072.18	10721.80
35-AP-0B-E	1.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	5156.00
36-AP-0B-N	15.0	EXT	0.0	0.66	2.4	1.30	AIR-CHANGE	0.30	472.98	4720.34
36-AP-0B-W	15.0	EXT	0.0	0.66	5.0	1.30	AIR-CHANGE	0.30	1006.15	10041.38

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WEATHER FILE- NEW YORK CITY TMY2

----- (CONTINUED) -----

36-AP-1B-S	15.0	EXT	0.0	0.66	10.2	1.30	AIR-CHANGE	0.30	2045.60	20415.09
36-AP-1B-SE	15.0	EXT	0.0	0.66	3.7	1.30	AIR-CHANGE	0.30	737.65	7361.75
36-AP-1B-NE	15.0	EXT	0.0	0.66	7.5	1.30	AIR-CHANGE	0.30	1508.35	15053.33
36-AP-1B-N	15.0	EXT	0.0	0.66	3.8	1.30	AIR-CHANGE	0.30	757.10	7555.86
36-AP-2B-SW	15.0	EXT	0.0	0.65	5.5	1.30	AIR-CHANGE	0.30	1090.91	10887.28
36-AP-0B-S	15.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	5035.41
36-STAIR	15.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	4066.35
36-CORR	15.0	INT	0.0	0.63	3.0	0.20	AIR-CHANGE	0.15	902.11	9003.06
36-AP-0B-E	15.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	5145.69
36-AP-2B-NW	15.0	EXT	0.0	0.65	5.1	1.30	AIR-CHANGE	0.30	1017.30	10152.65
51-AP-1B-S	4.0	EXT	0.0	0.66	10.3	1.30	AIR-CHANGE	0.30	2059.69	22924.35
51-AP-2B-SW	4.0	EXT	0.0	0.65	5.7	1.30	AIR-CHANGE	0.30	1139.18	12679.07
51-AP-0B-N	4.0	EXT	0.0	0.66	2.4	1.30	AIR-CHANGE	0.30	473.31	5267.94
51-AP-2B-NW	4.0	EXT	0.0	0.65	5.4	1.30	AIR-CHANGE	0.30	1082.77	12051.23
51-AP-0B-S	4.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	5615.64
51-AP-1B-SE	4.0	EXT	0.0	0.66	3.7	1.30	AIR-CHANGE	0.30	737.65	8210.04
51-AP-1B-NE	4.0	EXT	0.0	0.66	7.5	1.30	AIR-CHANGE	0.30	1508.35	16787.94
51-AP-1B-N	4.0	EXT	0.0	0.66	3.8	1.30	AIR-CHANGE	0.30	757.10	8426.52
51-STAIR	4.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	4534.92
51-CORR	4.0	INT	0.0	0.63	3.0	0.20	AIR-CHANGE	0.15	902.11	10040.48
51-AP-0B-E	4.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	5738.63
51-AP-1B-W	4.0	EXT	0.0	0.66	4.4	1.30	AIR-CHANGE	0.30	878.34	9775.92
55-AP-1B-S	6.0	EXT	0.0	0.66	6.8	1.30	AIR-CHANGE	0.30	1364.68	21248.07
55-AP-2B-NE	6.0	EXT	0.0	0.65	5.9	1.30	AIR-CHANGE	0.30	1170.08	18218.14
55-AP-0B-N	6.0	EXT	0.0	0.66	4.4	1.30	AIR-CHANGE	0.30	884.00	13763.88
55-AP-2B-SW	6.0	EXT	0.0	0.65	5.7	1.30	AIR-CHANGE	0.30	1139.18	17737.03
55-AP-2B-NW	6.0	EXT	0.0	0.65	5.4	1.30	AIR-CHANGE	0.30	1082.77	16858.73
55-AP-1B-NE	6.0	EXT	0.0	0.66	3.4	1.30	AIR-CHANGE	0.30	684.22	10653.31
55-AP-0B-S	6.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	7855.84
55-STAIR	6.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	6344.00

55-CORR	6.0	INT	0.0	0.63	3.0	0.20	AIR-CHANGE	0.15	902.11	14045.85
55-AP-0B-E	6.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	8027.89
55-AP-1B-W	6.0	EXT	0.0	0.66	4.4	1.30	AIR-CHANGE	0.30	878.34	13675.75
55-AP-3B-SE	6.0	EXT	0.0	0.70	7.2	1.30	AIR-CHANGE	0.30	1432.71	22307.29
61-AP-1B-S	1.0	EXT	0.0	0.66	6.8	1.30	AIR-CHANGE	0.30	1364.68	23199.56
61-AP-2B-NE	1.0	EXT	0.0	0.65	5.9	1.30	AIR-CHANGE	0.30	1170.08	19891.36
61-AP-0B-N	1.0	EXT	0.0	0.66	4.4	1.30	AIR-CHANGE	0.30	884.00	15028.00
61-AP-2B-SW	1.0	EXT	0.0	0.65	5.7	1.30	AIR-CHANGE	0.30	1139.18	19366.06
61-AP-2B-NW	1.0	EXT	0.0	0.65	5.4	1.30	AIR-CHANGE	0.30	1082.77	18407.09
61-AP-1B-NE	1.0	EXT	0.0	0.66	3.4	1.30	AIR-CHANGE	0.30	684.22	11631.74
61-AP-0B-S	1.0	EXT	0.0	0.66	2.5	1.30	AIR-CHANGE	0.30	504.55	8577.35
61-STAIR	1.0	INT	0.0	0.76	1.4	0.00	AIR-CHANGE	0.15	407.45	6926.65
61-CORR	1.0	EXT	0.0	0.63	3.0	0.20	AIR-CHANGE	0.15	902.11	15335.87
61-AP-0B-E	1.0	EXT	0.0	0.66	2.6	1.30	AIR-CHANGE	0.30	515.60	8765.20
61-AP-1B-W	1.0	EXT	0.0	0.66	4.4	1.30	AIR-CHANGE	0.30	878.34	14931.78
61-AP-3B-SE	1.0	EXT	0.0	0.70	7.2	1.30	AIR-CHANGE	0.30	1432.71	24356.07
62-LOUNGE	1.0	EXT	0.0	0.37	50.2	0.50	AIR-CHANGE	0.15	2511.73	33079.48
62-MECH	1.0	EXT	0.0	0.58	0.5	0.20	AIR-CHANGE	0.15	543.57	7158.82
62-DINING	1.0	EXT	0.0	0.58	53.5	0.50	AIR-CHANGE	0.15	1605.08	21138.90
62-PANTRY	1.0	EXT	0.0	0.58	4.8	0.50	AIR-CHANGE	0.15	144.85	1907.67
62-CORR	1.0	EXT	0.0	0.63	1.5	0.20	AIR-CHANGE	0.15	460.86	6069.53
62-ELEV-LOBBY	1.0	EXT	0.0	0.59	8.2	0.20	AIR-CHANGE	0.15	408.92	5385.48
62-VEST	1.0	INT	0.0	0.70	0.2	0.20	AIR-CHANGE	0.30	55.03	724.75
62-STAIR	1.0	EXT	0.0	0.76	0.7	0.00	AIR-CHANGE	0.15	213.78	2815.48
63-MECH	1.0	EXT	0.0	0.58	4.3	0.20	AIR-CHANGE	0.15	4342.97	65144.55
63-VEST	1.0	EXT	0.0	0.70	0.5	0.20	AIR-CHANGE	0.30	152.04	2280.60
63-CORR	1.0	INT	0.0	0.63	0.3	0.20	AIR-CHANGE	0.15	91.20	1368.00
1 DOE 2.1E MANHATTAN WEST RESIDENTIAL, NYC DOE-2.1E-121 Thu Feb 26 12:00:03 2015LDL RUN 1										
ADSGN: Design Case			SIM: VIDARIS INC.							
REPORT- LV-B SUMMARY OF SPACES OCCURRING IN THE PROJECT								WEATHER FILE- NEW YORK CITY TMY2		
----- (CONTINUED) -----										
63-STAIR	1.0	EXT	0.0	0.76	1.1	0.00	AIR-CHANGE	0.15	315.51	4732.65
64-CORR	1.0	EXT	0.0	0.63	0.4	0.20	AIR-CHANGE	0.15	114.16	1027.44
64-STAIR	1.0	EXT	0.0	0.76	0.8	0.00	AIR-CHANGE	0.15	247.74	2229.66
64-STORAGE	1.0	EXT	0.0	0.40	0.6	0.20	AIR-CHANGE	0.15	184.42	2428.81
64-EMR	1.0	EXT	0.0	0.67	0.9	5.00	AIR-CHANGE	0.15	863.55	11372.95
65-STAIR	1.0	EXT	0.0	0.76	0.5	0.00	AIR-CHANGE	0.15	142.55	1710.60
65-EMR	1.0	EXT	0.0	0.67	0.4	5.00	AIR-CHANGE	0.15	386.04	4632.48
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BUILDING TOTALS					3929.7			761138.31	9081029.00	

NUMBER OF EXTERIOR SURFACES 301 RECTANGULAR 301 OTHER 0
 (U-VALUE INCLUDES OUTSIDE AIR FILM; WINDOW INCLUDES FRAME, IF DEFINED)

SURFACE	SPACE	U-VALUE (BTU/HR-SQFT-F)	AREA (SQFT)	U-VALUE (BTU/HR-SQFT-F)	AREA (SQFT)	U-VALUE (BTU/HR-SQFT-F)	AREA (SQFT)	AZIMUTH
	SHAFT	0.000	0.00	0.106	340.00	0.106	340.00	WEST
	C-STORAGE	0.000	0.00	0.436	4183.00	0.436	4183.00	ROOF
	SHAFT	0.000	0.00	0.565	529.92	0.565	529.92	UNDERGRND
	SHAFT	0.000	0.00	0.110	132.73	0.110	132.73	UNDERGRND
	C-BOH	0.000	0.00	0.110	729.69	0.110	729.69	UNDERGRND
	C-BOH	0.000	0.00	0.110	252.07	0.110	252.07	UNDERGRND
	C-BOH	0.000	0.00	0.565	1089.00	0.565	1089.00	UNDERGRND
	C-STORAGE	0.000	0.00	0.110	295.49	0.110	295.49	UNDERGRND
	C-STORAGE	0.000	0.00	0.110	922.48	0.110	922.48	UNDERGRND
	C-STORAGE	0.000	0.00	0.110	733.72	0.110	733.72	UNDERGRND
	C-STORAGE	0.000	0.00	0.565	5038.16	0.565	5038.16	UNDERGRND
	C-LOCKER	0.000	0.00	0.565	587.58	0.565	587.58	UNDERGRND
	C-TELE	0.000	0.00	0.110	285.09	0.110	285.09	UNDERGRND
	C-TELE	0.000	0.00	0.565	230.43	0.565	230.43	UNDERGRND
	C-MECH	0.000	0.00	0.110	367.12	0.110	367.12	UNDERGRND
	C-MECH	0.000	0.00	0.110	390.26	0.110	390.26	UNDERGRND
	C-MECH	0.000	0.00	0.565	4617.20	0.565	4617.20	UNDERGRND
	C-OFC	0.000	0.00	0.110	423.15	0.110	423.15	UNDERGRND

C-OFC	0.000	0.00	0.110	402.35	0.110	402.35	UNDERGRND
C-OFC	0.000	0.00	0.565	1020.80	0.565	1020.80	UNDERGRND
C-STAIR	0.000	0.00	0.110	410.15	0.110	410.15	UNDERGRND
C-STAIR	0.000	0.00	0.565	476.11	0.565	476.11	UNDERGRND
C-ELEC	0.000	0.00	0.110	503.23	0.110	503.23	UNDERGRND
C-ELEC	0.000	0.00	0.565	2331.92	0.565	2331.92	UNDERGRND
C-CORR	0.000	0.00	0.110	97.89	0.110	97.89	UNDERGRND
C-CORR	0.000	0.00	0.110	1108.25	0.110	1108.25	UNDERGRND
C-CORR	0.000	0.00	0.110	58.76	0.110	58.76	UNDERGRND
C-CORR	0.000	0.00	0.565	2272.43	0.565	2272.43	UNDERGRND
C-ELEV-LOBBY	0.000	0.00	0.565	204.78	0.565	204.78	UNDERGRND
C-TANK	0.000	0.00	0.110	510.51	0.110	510.51	UNDERGRND
C-TANK	0.000	0.00	0.110	752.57	0.110	752.57	UNDERGRND
C-TANK	0.000	0.00	0.565	2092.15	0.565	2092.15	UNDERGRND
1-MOVE-IN	0.000	0.00	0.149	529.72	0.149	529.72	NORTH
1-BOH	0.000	0.00	0.149	1995.76	0.149	1995.76	NORTH
1-CORR	0.000	0.00	0.149	116.85	0.149	116.85	NORTH
1-OFF	0.000	0.00	0.149	304.00	0.149	304.00	NORTH
1-SECURITY	0.000	0.00	0.149	285.00	0.149	285.00	NORTH
1-STAIR	0.000	0.00	0.149	102.79	0.149	102.79	NORTH
1-STAIR	0.000	0.00	0.149	93.10	0.149	93.10	NORTH
1-PACKAGE	0.484	17.22	0.149	35.22	0.259	52.44	EAST
1-BOH	0.000	0.00	0.149	487.16	0.149	487.16	EAST
1-RETAIL	0.000	0.00	0.166	857.28	0.166	857.28	EAST
1-STAIR	0.000	0.00	0.149	327.94	0.149	327.94	EAST
1-MAILRM	1.211	340.53	0.149	568.62	0.547	909.15	SOUTH

1-LOBBY	1.211	177.87	0.166	303.97	0.552	481.84	SOUTH
1-RETAIL	1.211	272.36	0.149	458.76	0.545	731.12	SOUTH
1-PACKAGE	0.484	215.54	0.149	360.35	0.275	575.89	SOUTH
1-LOBBY	1.211	137.19	0.166	233.31	0.553	370.50	SOUTH
1-VEST	1.211	67.37	0.149	118.26	0.535	185.63	SOUTH
1-LOBBY	0.484	16.79	0.149	35.65	0.257	52.44	WEST
1-MAILRM	0.000	0.00	0.149	202.92	0.149	202.92	WEST
1-VEST	0.484	59.39	0.166	95.46	0.288	154.85	WEST
1-OFF	0.000	0.00	0.166	1163.75	0.166	1163.75	WEST
1-SALLYPORT	0.000	0.00	0.149	389.50	0.149	389.50	WEST
2-BASKETBALL	0.000	0.00	0.149	2537.29	0.149	2537.29	NORTH
2-GYM-N	0.000	0.00	0.149	549.45	0.149	549.45	NORTH
2-GYM-N	0.000	0.00	0.149	1481.93	0.149	1481.93	NORTH
2-STORAGE-N	0.000	0.00	0.149	498.00	0.149	498.00	NORTH
2-BASKETBALL	0.000	0.00	0.149	3814.65	0.149	3814.65	EAST
2-BASKETBALL	0.484	892.90	0.149	1644.38	0.267	2537.29	SOUTH
2-VEST	0.484	65.51	0.149	91.43	0.289	156.94	SOUTH
2-AMENITY-S	0.484	191.29	0.166	248.18	0.305	439.47	SOUTH
2-GYM-S	0.484	859.85	0.166	1073.12	0.308	1932.98	SOUTH
2-VEST	0.484	55.98	0.166	73.95	0.303	129.93	WEST
2-STORAGE-N	0.484	566.18	0.149	555.56	0.318	1121.74	WEST
2-CORR	0.484	31.44	0.166	39.95	0.306	71.40	WEST
2-AMENITY-S	0.484	109.22	0.149	127.16	0.304	236.38	WEST
2-BASKETBALL	0.000	0.00	0.439	490.00	0.439	490.00	FLOOR
2-STORAGE-N	0.000	0.00	0.439	522.00	0.439	522.00	FLOOR
2-GYM-N	0.000	0.00	0.439	2150.00	0.439	2150.00	FLOOR

2-BASKETBALL	0.000	0.00	0.237	4910.00	0.237	4910.00	FLOOR
2-GYM-N	0.000	0.00	0.043	3653.20	0.043	3653.20	ROOF
2-BASKETBALL	0.000	0.00	0.043	7282.80	0.043	7282.80	ROOF
3-FITNESS	0.000	0.00	0.149	410.04	0.149	410.04	NORTH
3-TOILET	0.000	0.00	0.149	473.11	0.149	473.11	NORTH
3-MECH	0.000	0.00	0.149	1129.99	0.149	1129.99	NORTH
3-LOUNGE	0.000	0.00	0.149	652.29	0.149	652.29	NORTH
3-OFC	0.484	289.08	0.166	498.36	0.283	787.44	SOUTH
3-FITNESS	0.000	0.00	0.166	424.66	0.166	424.66	SOUTH
3-LOUNGE	0.484	501.89	0.166	949.74	0.276	1451.63	SOUTH
3-OFC	0.484	274.33	0.166	447.83	0.287	722.16	WEST
3-MECH	0.484	355.67	0.166	686.26	0.275	1041.93	WEST
4-MECH-N	0.484	879.50	0.149	1209.80	0.290	2089.30	NORTH
4-AP-1B-NE	0.484	498.48	0.149	271.03	0.366	769.51	NORTH
4-AP-1B-N	0.484	435.59	0.325	285.13	0.421	720.72	NORTH
4-AP-0B-N	0.484	324.49	0.149	158.63	0.374	483.12	NORTH
4-AP-0B-N	0.484	579.48	0.166	340.51	0.367	919.99	NORTH
4-AP-1B-NE	0.484	541.51	0.166	488.09	0.334	1029.60	EAST
4-MECH-N	0.484	425.49	0.149	288.57	0.349	714.07	EAST
4-AP-1B-SE	0.484	538.55	0.166	491.05	0.333	1029.60	EAST
4-MECH-E	0.484	375.03	0.166	178.10	0.382	553.13	EAST
4-AP-0B-S	0.484	267.13	0.166	271.43	0.324	538.56	SOUTH
4-AP-1B-S	0.484	803.10	0.166	660.84	0.341	1463.93	SOUTH
4-AP-1B-S	0.484	807.19	0.166	652.63	0.342	1459.81	SOUTH
4-AP-2B-SW	0.484	424.47	0.166	327.93	0.346	752.40	SOUTH
4-AP-1B-SE	0.484	446.43	0.166	323.08	0.351	769.51	SOUTH

4-MECH-W	0.484	860.13	0.166	740.97	0.337	1601.11	WEST
4-AP-2B-SW	0.484	669.88	0.166	700.28	0.322	1370.16	WEST
4-MECH-N	0.484	252.30	0.149	102.83	0.387	355.13	WEST
7-AP-1B-NE	0.484	4328.65	0.325	1929.91	0.435	6258.56	NORTH
7-AP-1B-NE	0.484	4315.92	0.166	3568.47	0.340	7884.40	NORTH
7-AP-1B-N	0.484	3775.11	0.166	2086.66	0.371	5861.77	NORTH
7-AP-0B-N	0.484	2812.24	0.166	1117.07	0.394	3929.31	NORTH
7-AP-0B-N	0.484	5022.16	0.166	2460.28	0.380	7482.45	NORTH
7-AP-2B-NW	0.484	5711.44	0.166	3394.27	0.366	9105.70	NORTH
7-AP-1B-SE	0.484	4746.73	0.166	2883.62	0.364	7630.35	EAST
7-AP-1B-NE	0.484	3601.85	0.166	1690.09	0.383	5291.94	EAST
7-AP-0B-E	0.484	3258.82	0.325	840.44	0.452	4099.26	EAST
7-AP-1B-NE	0.484	4667.40	0.166	2962.95	0.361	7630.35	EAST
7-AP-1B-SE	0.484	3859.72	0.325	1508.37	0.440	5368.09	SOUTH
7-AP-0B-S	0.484	2315.09	0.166	1441.91	0.362	3757.00	SOUTH
7-AP-1B-S	0.484	6960.18	0.166	3252.23	0.383	10212.41	SOUTH
7-AP-1B-S	0.484	6995.62	0.166	3188.06	0.385	10183.68	SOUTH
7-AP-2B-SW	0.484	3710.48	0.166	1538.27	0.391	5248.75	SOUTH
7-AP-1B-W	0.484	2172.17	0.325	1234.87	0.427	3407.04	WEST
7-AP-1B-W	0.484	1895.71	0.166	1642.74	0.337	3538.45	WEST
7-AP-2B-SW	0.484	4423.33	0.166	6101.99	0.300	10525.32	WEST
7-AP-2B-NW	0.484	5546.93	0.166	2535.05	0.385	8081.99	WEST
33-AP-1B-NE	0.484	166.49	0.166	72.28	0.388	238.77	NORTH
33-AP-1B-NE	0.484	166.00	0.166	134.80	0.342	300.80	NORTH
33-AP-1B-N	0.484	145.20	0.166	78.44	0.373	223.63	NORTH
33-AP-0B-N	0.484	108.16	0.166	41.74	0.396	149.91	NORTH

33-AP-0B-N	0.484	193.16	0.166	92.30	0.381	285.46	NORTH
33-AP-2B-NW	0.484	219.67	0.166	127.72	0.367	347.39	NORTH
33-AP-1B-SE	0.484	182.57	0.325	136.91	0.416	319.48	EAST
33-AP-1B-NE	0.484	138.53	0.166	83.04	0.365	221.57	EAST
33-AP-0B-E	0.484	125.34	0.166	46.29	0.399	171.63	EAST
33-AP-1B-NE	0.484	179.52	0.166	139.96	0.345	319.48	EAST
33-AP-1B-SE	0.484	148.45	0.166	90.32	0.364	238.77	SOUTH
33-AP-0B-S	0.484	89.04	0.166	78.07	0.336	167.11	SOUTH
33-AP-1B-S	0.484	267.70	0.166	186.55	0.354	454.24	SOUTH
33-AP-1B-S	0.484	269.06	0.166	183.90	0.355	452.97	SOUTH
33-AP-2B-SW	0.484	142.71	0.166	90.75	0.361	233.46	SOUTH
33-AP-1B-W	0.484	156.46	0.166	124.09	0.344	280.55	WEST
33-AP-2B-SW	0.484	170.13	0.325	255.02	0.389	425.15	WEST
33-AP-2B-NW	0.484	213.34	0.166	113.11	0.374	326.45	WEST
33-AP-1B-NE	0.000	0.00	0.043	693.81	0.043	693.81	ROOF
33-AP-1B-SE	0.000	0.00	0.043	693.81	0.043	693.81	ROOF
33-AP-1B-SE	0.000	0.00	0.043	50.81	0.043	50.81	ROOF
33-AP-1B-NE	0.000	0.00	0.043	50.81	0.043	50.81	ROOF
33-CORR	0.000	0.00	0.043	24.61	0.043	24.61	ROOF
34-MECH-NE	0.484	256.87	0.166	211.13	0.341	468.00	NORTH
34-AP-0B-N	0.484	203.60	0.166	144.88	0.352	348.48	NORTH
34-AP-1B-NE	0.484	185.49	0.166	181.71	0.327	367.20	NORTH
34-MECH-NW	0.484	231.42	0.166	192.66	0.340	424.08	NORTH
34-MECH-E	0.484	125.34	0.166	84.18	0.357	209.52	EAST
34-MECH-NE	0.484	82.46	0.166	306.94	0.234	389.40	EAST
34-AP-1B-NE	0.484	138.53	0.166	131.95	0.329	270.48	EAST

34-AP-3B-SE	0.484	82.46	0.325	308.14	0.359	390.60	EAST
34-AP-2B-SW	0.484	145.94	0.166	139.06	0.329	285.00	SOUTH
34-AP-0B-S	0.484	102.46	0.166	101.54	0.326	204.00	SOUTH
34-AP-1B-S	0.484	281.19	0.325	273.33	0.406	554.52	SOUTH
34-AP-3B-SE	0.484	285.28	0.166	279.80	0.327	565.08	SOUTH
34-AP-1B-W	0.484	156.46	0.166	186.02	0.312	342.48	WEST
34-AP-2B-SW	0.484	184.71	0.166	334.29	0.279	519.00	WEST
34-MECH-NW	0.484	213.88	0.166	184.64	0.337	398.52	WEST
35-ELEC	0.484	97.31	0.166	66.09	0.356	163.40	NORTH
35-AP-1B-NE	0.484	179.29	0.166	85.91	0.381	265.20	NORTH
35-AP-1B-NE	0.484	185.49	0.166	121.11	0.359	306.60	NORTH
35-TANK	0.484	170.16	0.166	81.74	0.381	251.90	NORTH
35-AP-2B-NW	0.484	231.42	0.325	121.68	0.430	353.10	NORTH
35-AP-1B-NE	0.484	159.97	0.166	65.43	0.392	225.40	EAST
35-AP-1B-NE	0.484	82.46	0.166	242.04	0.247	324.50	EAST
35-AP-1B-SE	0.484	82.46	0.166	243.04	0.247	325.50	EAST
35-AP-0B-E	0.484	125.34	0.166	49.26	0.395	174.60	EAST
35-AP-1B-S	0.484	143.50	0.166	89.20	0.362	232.70	SOUTH
35-AP-2B-SW	0.484	145.94	0.325	91.56	0.423	237.50	SOUTH
35-AP-0B-S	0.484	102.46	0.166	67.54	0.358	170.00	SOUTH
35-AP-1B-SE	0.484	141.13	0.166	97.07	0.355	238.20	SOUTH
35-AP-1B-S	0.484	284.70	0.166	177.40	0.362	462.10	SOUTH
35-AP-2B-SW	0.484	246.84	0.325	185.66	0.416	432.50	WEST
35-AP-2B-NW	0.484	231.65	0.166	108.85	0.383	340.50	WEST
35-EMR	0.000	0.00	0.166	277.00	0.166	277.00	WEST
36-AP-0B-N	0.484	1459.71	0.325	986.38	0.420	2446.10	NORTH

36-AP-1B-NE	0.484	2689.40	0.166	1280.65	0.382	3970.04	NORTH
36-AP-1B-NE	0.484	2812.71	0.166	1777.09	0.361	4589.80	NORTH
36-AP-1B-N	0.484	2552.36	0.166	1218.59	0.382	3770.94	NORTH
36-AP-2B-NW	0.484	2518.10	0.166	2767.81	0.318	5285.91	NORTH
36-AP-1B-NE	0.484	2373.72	0.166	699.61	0.412	3073.33	EAST
36-AP-1B-NE	0.484	1236.90	0.166	3187.66	0.255	4424.56	EAST
36-AP-0B-E	0.484	1880.09	0.325	500.58	0.451	2380.67	EAST
36-AP-1B-SE	0.484	1236.90	0.166	3201.29	0.255	4438.19	EAST
36-AP-1B-S	0.484	2152.50	0.166	835.37	0.395	2987.87	SOUTH
36-AP-2B-SW	0.484	2189.09	0.166	860.41	0.395	3049.50	SOUTH
36-AP-0B-S	0.484	1536.88	0.325	645.92	0.437	2182.80	SOUTH
36-AP-1B-SE	0.484	2116.98	0.166	941.50	0.386	3058.49	SOUTH
36-AP-1B-S	0.484	4270.56	0.166	1662.80	0.395	5933.36	SOUTH
36-AP-2B-SW	0.484	3639.90	0.166	2179.38	0.365	5819.29	WEST
36-AP-0B-W	0.484	2688.63	0.166	1197.17	0.386	3885.80	WEST
36-AP-2B-NW	0.484	3349.39	0.166	1073.26	0.407	4422.66	WEST
51-AP-0B-N	0.484	389.26	0.325	338.20	0.410	727.46	NORTH
51-AP-2B-NW	0.484	929.91	0.166	643.43	0.354	1573.34	NORTH
51-AP-1B-NE	0.484	717.17	0.166	463.50	0.359	1180.67	NORTH
51-AP-1B-NE	0.484	741.97	0.166	623.01	0.339	1364.98	NORTH
51-AP-1B-N	0.484	680.63	0.166	440.83	0.359	1121.46	NORTH
51-AP-1B-SE	0.484	329.84	0.166	1119.29	0.239	1449.13	EAST
51-AP-1B-NE	0.484	639.89	0.325	363.59	0.427	1003.48	EAST
51-AP-1B-NE	0.484	329.84	0.166	1114.83	0.239	1444.67	EAST
51-AP-0B-E	0.484	514.55	0.166	262.77	0.377	777.32	EAST
51-AP-1B-S	0.484	574.00	0.166	461.98	0.342	1035.98	SOUTH

51-AP-0B-S	0.484	409.84	0.166	347.00	0.338	756.84	SOUTH
51-AP-2B-SW	0.484	583.76	0.166	472.26	0.342	1056.01	SOUTH
51-AP-1B-SE	0.484	564.53	0.325	495.94	0.410	1060.47	SOUTH
51-AP-1B-S	0.484	1138.82	0.166	918.45	0.342	2057.27	SOUTH
51-AP-2B-NW	0.484	892.56	0.325	645.60	0.418	1538.17	WEST
51-AP-2B-SW	0.484	969.43	0.166	956.06	0.326	1925.49	WEST
51-AP-1B-W	0.484	665.32	0.166	545.62	0.341	1210.94	WEST
55-AP-2B-NE	0.484	1531.90	0.166	2052.62	0.302	3584.53	NORTH
55-AP-0B-N	0.484	1148.68	0.166	1624.02	0.298	2772.71	NORTH
55-AP-2B-NW	0.484	1398.78	0.166	1902.68	0.301	3301.46	NORTH
55-AP-1B-NE	0.484	1112.95	0.166	1751.30	0.290	2864.26	NORTH
55-AP-2B-NE	0.484	494.76	0.166	1927.31	0.231	2422.07	EAST
55-AP-1B-NE	0.484	959.83	0.166	722.55	0.348	1682.39	EAST
55-AP-0B-E	0.484	771.83	0.166	532.14	0.355	1303.96	EAST
55-AP-3B-SE	0.484	494.76	0.166	1934.77	0.231	2429.53	EAST
55-AP-0B-S	0.484	614.75	0.166	424.63	0.354	1039.38	SOUTH
55-AP-2B-SW	0.484	875.64	0.166	574.60	0.358	1450.24	SOUTH
55-AP-1B-S	0.484	1708.22	0.166	1117.06	0.359	2825.28	SOUTH
55-AP-3B-SE	0.484	1712.53	0.166	1457.57	0.338	3170.10	SOUTH
55-AP-1B-W	0.484	993.43	0.166	837.68	0.339	1831.10	WEST
55-AP-2B-SW	0.484	1455.05	0.166	1456.54	0.325	2911.59	WEST
55-AP-2B-NW	0.484	1338.85	0.166	987.06	0.349	2325.91	WEST
61-AP-2B-NE	0.484	317.13	0.166	335.16	0.321	652.29	NORTH
61-AP-0B-N	0.484	237.80	0.166	266.76	0.316	504.56	NORTH
61-AP-2B-NW	0.484	289.57	0.166	311.21	0.320	600.78	NORTH
61-AP-1B-NE	0.484	230.40	0.166	290.82	0.307	521.22	NORTH

61-AP-2B-NE	0.484	101.32	0.166	450.33	0.225	551.65	EAST
61-AP-1B-NE	0.484	196.56	0.166	186.62	0.329	383.18	EAST
61-AP-0B-E	0.484	158.06	0.166	138.93	0.336	296.99	EAST
61-AP-3B-SE	0.484	101.32	0.166	452.03	0.225	553.35	EAST
61-AP-0B-S	0.484	144.68	0.166	144.32	0.325	289.00	SOUTH
61-AP-2B-SW	0.484	206.08	0.166	197.16	0.329	403.24	SOUTH
61-AP-1B-S	0.484	402.04	0.166	383.53	0.329	785.57	SOUTH
61-AP-3B-SE	0.484	403.05	0.166	397.48	0.326	800.53	SOUTH
61-AP-1B-W	0.484	202.28	0.166	260.12	0.305	462.40	WEST
61-AP-2B-SW	0.484	323.51	0.166	411.74	0.306	735.25	WEST
61-AP-2B-NW	0.484	262.29	0.166	325.06	0.308	587.35	WEST
61-AP-2B-NE	0.000	0.00	0.043	152.95	0.043	152.95	ROOF
61-AP-1B-S	0.000	0.00	0.043	405.99	0.043	405.99	ROOF
61-AP-0B-N	0.000	0.00	0.043	647.62	0.043	647.62	ROOF
61-AP-1B-NE	0.000	0.00	0.043	837.23	0.043	837.23	ROOF
61-AP-1B-S	0.000	0.00	0.043	945.92	0.043	945.92	ROOF
61-AP-0B-S	0.000	0.00	0.043	39.23	0.043	39.23	ROOF
61-AP-0B-S	0.000	0.00	0.043	341.36	0.043	341.36	ROOF
61-CORR	0.000	0.00	0.043	266.28	0.043	266.28	ROOF
61-AP-2B-NE	0.000	0.00	0.043	27.03	0.043	27.03	ROOF
61-AP-2B-SW	0.000	0.00	0.043	481.28	0.043	481.28	ROOF
61-AP-2B-SW	0.000	0.00	0.043	224.98	0.043	224.98	ROOF
61-AP-2B-NE	0.000	0.00	0.043	154.63	0.043	154.63	ROOF
61-AP-3B-SE	0.000	0.00	0.043	945.57	0.043	945.57	ROOF
62-LOUNGE	0.000	0.00	0.149	84.42	0.149	84.42	NORTH
62-LOUNGE	0.484	672.96	0.149	53.50	0.460	726.46	NORTH

62-DINING	0.484	444.73	0.149	414.75	0.323	859.47	NORTH
62-MECH	0.000	0.00	0.149	111.68	0.149	111.68	EAST
62-DINING	0.484	141.09	0.166	183.16	0.305	324.25	EAST
62-LOUNGE	0.484	278.30	0.166	25.92	0.457	304.23	EAST
62-PANTRY	0.000	0.00	0.149	120.51	0.149	120.51	EAST
62-CORR	0.000	0.00	0.149	113.53	0.149	113.53	EAST
62-STAIR	0.000	0.00	0.149	343.34	0.149	343.34	EAST
62-MECH	0.000	0.00	0.166	297.25	0.166	297.25	SOUTH
62-CORR	0.000	0.00	0.166	132.49	0.166	132.49	SOUTH
62-LOUNGE	0.484	242.01	0.166	404.50	0.285	646.52	SOUTH
62-ELEV-LOBBY	0.000	0.00	0.166	187.01	0.166	187.01	SOUTH
62-LOUNGE	0.484	591.94	0.166	134.52	0.425	726.46	SOUTH
62-STAIR	0.000	0.00	0.166	107.99	0.166	107.99	SOUTH
62-MECH	0.000	0.00	0.149	193.86	0.149	193.86	WEST
62-LOUNGE	0.484	150.61	0.149	344.85	0.251	495.46	WEST
62-DINING	0.484	152.39	0.149	171.33	0.307	323.72	WEST
62-LOUNGE	0.000	0.00	0.149	103.91	0.149	103.91	WEST
62-LOUNGE	0.000	0.00	0.149	88.37	0.149	88.37	WEST
62-LOUNGE	0.000	0.00	0.045	1274.20	0.045	1274.20	ROOF
62-LOUNGE	0.000	0.00	0.045	69.28	0.045	69.28	ROOF
63-MECH	0.000	0.00	0.149	975.00	0.149	975.00	NORTH
63-STAIR	0.000	0.00	0.149	12.75	0.149	12.75	NORTH
63-VEST	0.000	0.00	0.149	118.80	0.149	118.80	EAST
63-MECH	0.000	0.00	0.149	624.15	0.149	624.15	EAST
63-STAIR	0.000	0.00	0.149	404.25	0.149	404.25	EAST
63-MECH	0.000	0.00	0.149	703.80	0.149	703.80	SOUTH

63-VEST	0.000	0.00	0.149	285.60	0.149	285.60	SOUTH
63-MECH	0.000	0.00	0.149	1147.65	0.149	1147.65	WEST
63-MECH	0.000	0.00	0.045	218.19	0.045	218.19	ROOF
63-MECH	0.000	0.00	0.045	443.15	0.045	443.15	ROOF
63-MECH	0.000	0.00	0.045	1909.32	0.045	1909.32	ROOF
63-VEST	0.000	0.00	0.045	150.99	0.045	150.99	ROOF
63-MECH	0.000	0.00	0.045	132.65	0.045	132.65	ROOF
63-MECH	0.000	0.00	0.045	727.37	0.045	727.37	ROOF
64-CORR	0.000	0.00	0.149	67.32	0.149	67.32	NORTH
64-CORR	0.000	0.00	0.149	17.28	0.149	17.28	NORTH
64-STAIR	0.000	0.00	0.149	87.12	0.149	87.12	NORTH
64-EMR	0.000	0.00	0.149	93.60	0.149	93.60	NORTH
64-EMR	0.000	0.00	0.149	151.11	0.149	151.11	NORTH
64-CORR	0.000	0.00	0.149	70.92	0.149	70.92	EAST
64-STAIR	0.000	0.00	0.149	230.22	0.149	230.22	EAST
64-EMR	0.000	0.00	0.149	245.25	0.149	245.25	SOUTH
64-STAIR	0.000	0.00	0.149	87.21	0.149	87.21	SOUTH
64-STORAGE	0.000	0.00	0.149	84.24	0.149	84.24	SOUTH
64-EMR	0.000	0.00	0.149	39.69	0.149	39.69	WEST
64-EMR	0.000	0.00	0.149	260.73	0.149	260.73	WEST
64-CORR	0.000	0.00	0.045	58.87	0.045	58.87	ROOF
64-EMR	0.000	0.00	0.045	790.49	0.045	790.49	ROOF
64-EMR	0.000	0.00	0.045	74.04	0.045	74.04	ROOF

	AVERAGE U-VALUE /WINDOWS (BTU/HR-SQFT-F)	AVERAGE U-VALUE /WALLS (BTU/HR-SQFT-F)	AVERAGE U-VALUE WALLS+WINDOWS (BTU/HR-SQFT-F)	WINDOW AREA (SQFT)	WALL AREA (SQFT)	WINDOW+WALL AREA (SQFT)
NORTH	0.484	0.173	0.334	54298.9	50766.2	105065.1
EAST	0.484	0.172	0.318	31917.1	36323.1	68240.3
SOUTH	0.497	0.177	0.369	55588.3	37091.8	92680.1
WEST	0.484	0.175	0.338	35946.6	32211.1	68157.7
FLOOR	0.000	0.316	0.316	0.0	8072.0	8072.0
ROOF	0.000	0.102	0.102	0.0	27951.5	27951.5
ALL WALLS	0.488	0.174	0.341	177750.9	156392.2	334143.2
WALLS+ROOFS	0.488	0.163	0.323	177750.9	184343.7	362094.6
UNDERGRND	0.000	0.433	0.433	0.0	28866.0	28866.0
BUILDING	0.488	0.200	0.331	177750.9	213209.7	390960.6

ADSGN: Design Case

SIM: VIDARIS INC.

REPORT- LV-I DETAILS OF CONSTRUCTIONS OCCURRING IN THE PROJECT

WEATHER FILE- NEW YORK CITY TMY2

NUMBER OF CONSTRUCTIONS 17 DELAYED 15 QUICK 2

CONSTRUCTION NAME	U-VALUE (BTU/HR-SQFT-F)	SURFACE ABSORPTANCE	SURFACE ROUGHNESS INDEX	SURFACE TYPE	NUMBER OF RESPONSE FACTORS
MASS-WALL	0.159	0.70	3	DELAYED	14
SPANDREL-WALL	0.178	0.70	3	DELAYED	5
METAL-WALL	0.374	0.70	3	QUICK	0
EW-C-CON	0.110	0.70	3	DELAYED	7
MECH-RF-CON	0.046	0.70	3	DELAYED	15
TERR-RF-CON	0.044	0.70	3	DELAYED	16
STREET-RF-CON	0.528	0.70	3	DELAYED	12
FL-CON	0.294	0.70	3	DELAYED	7
FL-ADIAB-CON	0.294	0.70	3	DELAYED	7
EXT-FL-CON	0.532	0.70	3	DELAYED	6
EXT-FL-SALLY-CON	0.261	0.70	3	DELAYED	11
CL-CON	0.805	0.70	3	DELAYED	4
CL-ADIAB-CON	0.805	0.70	3	DELAYED	4
IW-CON	0.355	0.70	3	DELAYED	4
IW-ADIAB-CON	0.355	0.70	3	DELAYED	4
UW-CON	0.565	0.70	3	DELAYED	13
LV-CON	2.700	0.70	3	QUICK	0

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ADSGN: Design Case SIM: VIDARIS INC.

REPORT- SV-A SYSTEM DESIGN PARAMETERS

CORR-SYS

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
CORR-SYS	PVAVS	1.000	29383.9	98.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
13000.	8.981	2.1	13000.	8.981	2.1	1.000	734.207	0.375	-851.661	0.24	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
4-CORR		277.	0.	0.000	1.000	277.	0.00	0.00	4.19	-12.88	-54.31	3.0
7-CORR		277.	0.	0.000	1.000	277.	0.00	0.00	4.19	-12.88	-54.31	26.0
33-CORR		4958.	0.	0.000	1.000	4958.	0.00	0.00	74.96	-230.23	-231.22	1.0

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ADSGN: Design Case SIM: VIDARIS INC.

REPORT- SV-A SYSTEM DESIGN PARAMETERS

RF-CORR-SYS

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
RF-CORR-SYS	PVAVS	1.000	25925.3	86.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
13000.	12.829	3.1	13000.	6.726	1.6	1.000	692.822	0.414	-838.186	0.25	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
34-CORR		630.	0.	0.000	1.000	630.	0.00	0.00	9.52	-29.25	-23.80	1.0
35-CORR		439.	0.	0.000	1.000	439.	0.00	0.00	6.64	-20.38	-16.59	1.0
36-CORR		326.	0.	0.000	1.000	326.	0.00	0.00	4.93	-15.14	-12.33	15.0

51-CORR	405.	0.	0.000	1.000	405.	0.00	0.00	6.12	-18.81	-15.31	4.0
55-CORR	634.	0.	0.000	1.000	634.	0.00	0.00	9.59	-29.44	-23.96	6.0
61-CORR	745.	0.	0.000	1.000	745.	0.00	0.00	11.27	-34.61	-28.17	1.0
62-CORR	581.	0.	0.000	1.000	581.	0.00	0.00	8.78	-26.98	-21.96	1.0
63-CORR	163.	0.	0.000	1.000	163.	0.00	0.00	2.47	-7.58	-6.17	1.0
64-CORR	126.	0.	0.000	1.000	126.	0.00	0.00	1.91	-5.87	-4.78	1.0

[illegible]

SYSTEM NAME	SYSTEM TYPE		ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)		MAX PEOPLE						
RES-S-SYS	PTAC		1.000	212346.4		1062.						
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
220414.	0.000	0.9	0.	0.000	0.0	0.001	0.000	0.000	0.000	0.26	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
4-AP-0B-S		394.	0.	0.118	1.000	0.	11.53	0.64	8.42	-8.09	-8.51	3.0
4-AP-1B-S		2161.	0.	0.648	1.000	2.	62.88	0.64	46.19	-44.37	-46.68	3.0
7-AP-0B-S		398.	0.	0.120	1.000	0.	11.67	0.64	8.51	-8.18	-8.61	26.0
7-AP-1B-S		2185.	0.	0.656	1.000	2.	63.64	0.64	46.70	-44.86	-47.20	26.0
33-AP-0B-S		485.	0.	0.145	1.000	0.	14.15	0.64	10.36	-9.95	-10.47	1.0
33-AP-1B-S		2653.	0.	0.796	1.000	3.	77.07	0.64	56.70	-54.46	-57.31	1.0
34-AP-0B-S		602.	0.	0.181	1.000	1.	17.53	0.64	12.86	-12.35	-13.00	1.0
34-AP-1B-S		1690.	0.	0.507	1.000	2.	48.97	0.65	36.11	-34.69	-36.50	1.0
35-AP-1B-S		2105.	0.	0.631	1.000	2.	61.09	0.64	44.99	-43.21	-45.47	1.0
35-AP-0B-S		515.	0.	0.155	1.000	1.	15.01	0.64	11.01	-10.57	-11.12	1.0

36-AP-1B-S	2067.	0.	0.620	1.000	2.	60.07	0.64	44.17	-42.43	-44.64	15.0
36-AP-0B-S	526.	0.	0.158	1.000	1.	15.34	0.64	11.25	-10.80	-11.37	15.0
51-AP-1B-S	2451.	0.	0.735	1.000	2.	71.13	0.64	52.38	-50.31	-52.94	4.0
51-AP-0B-S	598.	0.	0.179	1.000	1.	17.42	0.64	12.78	-12.27	-12.92	4.0
55-AP-1B-S	2208.	0.	0.662	1.000	2.	64.08	0.64	47.18	-45.32	-47.69	6.0
55-AP-0B-S	814.	0.	0.244	1.000	1.	23.69	0.64	17.40	-16.71	-17.59	6.0
4-AP-1B-SE	836.	0.	0.251	1.000	1.	24.02	0.65	17.86	-17.16	-18.06	3.0
7-AP-1B-SE	853.	0.	0.256	1.000	1.	24.54	0.65	18.23	-17.52	-18.43	26.0
33-AP-1B-SE	1045.	0.	0.314	1.000	1.	29.98	0.65	22.34	-21.46	-22.58	1.0
34-AP-3B-SE	2012.	0.	0.603	1.000	2.	58.06	0.65	42.99	-41.29	-43.45	1.0
35-AP-1B-SE	922.	0.	0.277	1.000	1.	26.64	0.65	19.71	-18.93	-19.92	1.0
36-AP-1B-SE	902.	0.	0.270	1.000	1.	26.08	0.65	19.27	-18.51	-19.48	15.0

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 ADSGN: Design Case SIM: VIDARIS INC.
 REPORT- SV-A SYSTEM DESIGN PARAMETERS RES-S-SYS WEATHER FILE- NEW YORK CITY TMY2

(CONTINUED)											
51-AP-1B-SE	1094.	0.	0.328	1.000	1.	31.56	0.65	23.38	-22.46	-23.63	4.0
55-AP-3B-SE	2536.	0.	0.761	1.000	3.	73.37	0.65	54.20	-52.06	-54.78	6.0
61-AP-1B-S	2635.	0.	0.790	1.000	3.	76.22	0.65	56.31	-54.08	-56.91	1.0
61-AP-0B-S	967.	0.	0.290	1.000	1.	28.04	0.65	20.67	-19.85	-20.89	1.0
61-AP-3B-SE	2910.	0.	0.873	1.000	3.	84.04	0.65	62.20	-59.74	-62.86	1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
 ADSGN: Design Case SIM: VIDARIS INC.
 REPORT- SV-A SYSTEM DESIGN PARAMETERS RES-W-SYS WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE		ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)		MAX PEOPLE					
RES-W-SYS	PTAC		1.000	108186.0		541.					
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)
127058.	0.000	0.9	0.	0.000	0.0	0.001	0.000	0.000	0.000	0.23	0.37

ZONE NAME	SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
7-AP-1B-W	601.	0.	0.180	1.000	1.	17.26	0.65	12.84	-13.67	-14.28	26.0
33-AP-1B-W	757.	0.	0.227	1.000	1.	21.66	0.65	16.19	-15.55	-16.36	1.0
34-AP-1B-W	944.	0.	0.283	1.000	1.	26.94	0.66	20.18	-19.39	-20.40	1.0
36-AP-0B-W	1076.	0.	0.323	1.000	1.	30.77	0.65	22.99	-22.08	-23.23	15.0
51-AP-1B-W	1103.	0.	0.331	1.000	1.	31.50	0.65	23.57	-22.64	-23.82	4.0
55-AP-1B-W	1492.	0.	0.448	1.000	1.	42.54	0.66	31.88	-30.62	-32.22	6.0
4-AP-2B-SW	1147.	0.	0.344	1.000	1.	32.62	0.66	24.51	-23.55	-24.77	3.0
7-AP-2B-SW	1116.	0.	0.335	1.000	1.	31.77	0.66	23.84	-22.90	-24.09	26.0
33-AP-2B-SW	1354.	0.	0.406	1.000	1.	38.52	0.66	28.94	-27.80	-29.25	1.0
34-AP-2B-SW	1526.	0.	0.458	1.000	2.	43.38	0.66	32.61	-31.32	-32.96	1.0
35-AP-2B-SW	1469.	0.	0.441	1.000	1.	41.74	0.66	31.40	-30.16	-31.74	1.0
36-AP-2B-SW	1343.	0.	0.403	1.000	1.	38.19	0.66	28.69	-27.56	-29.00	15.0
51-AP-2B-SW	1611.	0.	0.483	1.000	2.	45.77	0.66	34.42	-33.06	-34.79	4.0
55-AP-2B-SW	2106.	0.	0.632	1.000	2.	59.84	0.66	45.01	-43.24	-45.49	6.0
61-AP-1B-W	1711.	0.	0.513	1.000	2.	48.72	0.66	36.58	-35.13	-36.97	1.0
61-AP-2B-SW	2513.	0.	0.754	1.000	3.	71.24	0.66	53.71	-51.59	-54.28	1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1

ADSGN: Design Case

SIM: VIDARIS INC.

REPORT- SV-A SYSTEM DESIGN PARAMETERS

RES-E-SYS

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE							
RES-E-SYS	PTAC	1.000	113370.6	567.							
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)
151100.	0.000	0.9	0.	0.000	0.0	0.001	0.000	0.000	0.000	0.23	0.37

ZONE NAME	SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
7-AP-0B-E	475.	0.	0.143	1.000	0.	13.78	0.64	10.16	-9.76	-10.27	26.0
33-AP-0B-E	568.	0.	0.171	1.000	1.	16.44	0.65	12.15	-11.67	-12.28	1.0
35-AP-0B-E	588.	0.	0.176	1.000	1.	17.00	0.65	12.57	-12.07	-12.70	1.0
36-AP-0B-E	598.	0.	0.179	1.000	1.	16.91	0.66	12.78	-12.28	-12.92	15.0
51-AP-0B-E	676.	0.	0.203	1.000	1.	19.11	0.66	14.45	-13.88	-14.61	4.0
55-AP-0B-E	916.	0.	0.275	1.000	1.	25.83	0.66	19.57	-18.80	-19.78	6.0
4-AP-1B-NE	867.	0.	0.260	1.000	1.	24.90	0.65	18.54	-17.81	-18.74	3.0
7-AP-1B-NE	1716.	0.	0.515	1.000	2.	49.17	0.65	36.68	-35.23	-37.07	26.0
33-AP-1B-NE	1857.	0.	0.557	1.000	2.	53.29	0.65	39.69	-38.13	-40.12	1.0
34-AP-1B-NE	1055.	0.	0.316	1.000	1.	30.30	0.65	22.54	-21.65	-22.79	1.0
35-AP-1B-NE	2097.	0.	0.629	1.000	2.	60.05	0.65	44.81	-43.04	-45.29	1.0
36-AP-1B-NE	2077.	0.	0.623	1.000	2.	59.54	0.65	44.39	-42.63	-44.86	15.0
51-AP-1B-NE	2373.	0.	0.712	1.000	2.	68.02	0.65	50.72	-48.72	-51.26	4.0
55-AP-2B-NE	2287.	0.	0.686	1.000	2.	65.96	0.65	48.88	-46.95	-49.41	6.0
55-AP-1B-NE	1436.	0.	0.431	1.000	1.	41.22	0.65	30.69	-29.48	-31.02	6.0
61-AP-1B-NE	1659.	0.	0.498	1.000	2.	47.55	0.65	35.46	-34.06	-35.84	1.0
61-AP-2B-NE	2499.	0.	0.750	1.000	2.	71.84	0.65	53.41	-51.30	-53.98	1.0
61-AP-0B-E	1040.	0.	0.312	1.000	1.	29.28	0.66	22.22	-21.34	-22.45	1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
ADSGN: Design Case SIM: VIDARIS INC.

REPORT- SV-A SYSTEM DESIGN PARAMETERS

RES-N-SYS

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE							
RES-N-SYS	PTAC	1.000	147213.9	736.							
SUPPLY		RETURN		OUTSIDE		COOLING	HEATING		COOLING	HEATING	

FAN (CFM)	ELEC (KW)	DELTA-T (F)	FAN (CFM)	ELEC (KW)	DELTA-T (F)	AIR RATIO	CAPACITY (KBTU/HR)	SENSIBLE (SHR)	CAPACITY (KBTU/HR)	EIR (BTU/BTU)	EIR (BTU/BTU)	
173853.	0.000	0.9	0.	0.000	0.0	0.001	0.000	0.000	0.000	0.23	0.37	
ZONE NAME	SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	EXTRACTION SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER	
4-AP-1B-N	633.	0.	0.190	1.000	1.	18.30	0.65	13.53	-13.00	-13.68	3.0	
4-AP-0B-N	1167.	0.	0.350	1.000	1.	33.86	0.64	24.95	-23.96	-25.22	3.0	
7-AP-1B-N	612.	0.	0.184	1.000	1.	17.80	0.64	13.07	-12.56	-13.21	26.0	
7-AP-0B-N	1208.	0.	0.363	1.000	1.	35.06	0.64	25.83	-24.81	-26.10	26.0	
33-AP-1B-N	730.	0.	0.219	1.000	1.	21.10	0.65	15.60	-14.98	-15.77	1.0	
33-AP-0B-N	1428.	0.	0.429	1.000	1.	41.21	0.65	30.53	-29.32	-30.86	1.0	
34-AP-0B-N	1168.	0.	0.350	1.000	1.	33.67	0.65	24.96	-23.98	-25.23	1.0	
36-AP-0B-N	564.	0.	0.169	1.000	1.	16.30	0.65	12.05	-11.58	-12.18	15.0	
36-AP-1B-N	855.	0.	0.257	1.000	1.	24.81	0.64	18.28	-17.56	-18.48	15.0	
51-AP-0B-N	650.	0.	0.195	1.000	1.	18.77	0.65	13.89	-13.34	-14.04	4.0	
51-AP-1B-N	978.	0.	0.293	1.000	1.	28.36	0.65	20.91	-20.08	-21.13	4.0	
55-AP-0B-N	1592.	0.	0.478	1.000	2.	46.05	0.65	34.02	-32.67	-34.38	6.0	
7-AP-2B-NW	1252.	0.	0.376	1.000	1.	35.54	0.66	26.77	-25.71	-27.05	26.0	
33-AP-2B-NW	1383.	0.	0.415	1.000	1.	39.25	0.66	29.55	-28.39	-29.87	1.0	
35-AP-2B-NW	1521.	0.	0.456	1.000	2.	43.10	0.66	32.51	-31.23	-32.86	1.0	
36-AP-2B-NW	1364.	0.	0.409	1.000	1.	38.73	0.66	29.15	-28.00	-29.47	15.0	
51-AP-2B-NW	1737.	0.	0.521	1.000	2.	49.23	0.66	37.13	-35.66	-37.53	4.0	
55-AP-2B-NW	2209.	0.	0.663	1.000	2.	62.63	0.66	47.22	-45.35	-47.72	6.0	
61-AP-0B-N	1795.	0.	0.539	1.000	2.	51.87	0.65	38.37	-36.85	-38.78	1.0	
61-AP-2B-NW	2514.	0.	0.754	1.000	3.	71.20	0.66	53.74	-51.62	-54.31	1.0	
1 DOE 2.1E			Manhattan West Residential				DOE-2.1E-121		Thu Feb 26 12:00:03 2015SDL RUN			1
ADSGN: Design Case			SIM: VIDARIS INC.									

REPORT- SV-A SYSTEM DESIGN PARAMETERS

AC-3-4

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE		ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)		MAX PEOPLE							
AC-3-4	PVAVS		1.000	11748.2		147.							
SUPPLY FAN (CFM)		ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
15000.		10.905	2.2	15000.	4.380	0.9	0.433	786.901	0.475	-424.681	0.24	0.37	
ZONE NAME		SUPPLY FLOW (CFM)		EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
2-GYM-S		5702.		0.	0.000	0.433	2469.	0.00	0.00	123.16	-133.32	-1093.32	1.0
2-GYM-N		9298.		0.	0.000	0.433	4026.	0.00	0.00	200.84	-217.41	-152.19	1.0

1 DOE 2.1E

ADSGN: Design Case

Manhattan West Residential

SIM: VIDARIS INC.

DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1

REPORT- SV-A SYSTEM DESIGN PARAMETERS

AC-4-2

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE		ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)		MAX PEOPLE							
AC-4-2	PVAVS		1.000	7333.7		92.							
SUPPLY FAN (CFM)		ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
11000.		7.168	2.0	11000.	3.521	1.0	0.191	461.567	0.559	-534.029	0.25	0.37	
ZONE NAME		SUPPLY FLOW (CFM)		EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
2-BASKETBALL		11000.		0.	0.000	0.530	2101.	0.00	0.00	237.60	-594.00	-415.80	1.0

1 DOE 2.1E

ADSGN: Design Case

Manhattan West Residential

SIM: VIDARIS INC.

DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1

REPORT- SV-A SYSTEM DESIGN PARAMETERS

AC-4-3-AMENITY-S

WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE
AC-4-3-AMENITY-S	PVAVS	1.000	11262.9	149.

SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
10000.	6.190	1.9	10000.	3.316	1.0	0.170	449.835	0.493	-441.716	0.25	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
3-LOUNGE		4168.	0.	0.000	0.434	709.	0.00	0.00	90.04	-225.09	-1157.56	1.0
3-TOILET		1609.	0.	0.000	0.434	273.	0.00	0.00	34.75	-86.87	-60.81	1.0
3-CORR		524.	0.	0.000	0.434	89.	0.00	0.00	11.88	-28.29	-19.81	1.0
3-STORAGE		91.	0.	0.000	0.434	15.	0.00	0.00	3.43	-4.90	-3.43	1.0
3-OFC		2096.	0.	0.000	0.434	356.	0.00	0.00	45.27	-113.18	-1079.22	1.0
3-FITNESS		1512.	0.	0.000	0.434	257.	0.00	0.00	32.67	-35.45	-24.81	1.0
3-PLENUM		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1 ADSGN: Design Case SIM: VIDARIS INC. REPORT- SV-A SYSTEM DESIGN PARAMETERS AC-63-2 WEATHER FILE- NEW YORK CITY TMY2												
SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
AC-63-2	PVAVS	1.000	4670.6	117.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
14000.	12.830	2.8	12000.	3.557	0.9	0.214	519.926	0.593	-689.392	0.27	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
62-LOUNGE		8411.	0.	0.000	0.214	1800.	0.00	0.00	181.67	-454.17	-317.92	1.0
62-ELEV-LOBBY		621.	0.	0.000	0.214	133.	0.00	0.00	13.42	-33.54	-23.48	1.0
62-DINING		4641.	0.	0.000	0.214	993.	0.00	0.00	100.25	-250.62	-175.44	1.0

62-PANTRY		327.	0.	0.000	0.214	70.	0.00	0.00	7.06	-17.66	-12.36	1.0
1 DOE 2.1E	Manhattan West Residential					DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1						
ADSGN: Design Case	SIM: VIDARIS INC.											
REPORT- SV-A	SYSTEM DESIGN PARAMETERS					LOBBY-SYS		WEATHER FILE- NEW YORK CITY TMY2				
SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER		FLOOR AREA (SQFT)		MAX PEOPLE						
LOBBY-SYS	PVAVS	1.000		1786.4		36.						
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
8000.	5.245	2.0	8000.	3.221	1.2	0.500	432.004	0.435	-262.543	0.25	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
1-LOBBY		8000.	0.	0.000	0.500	4000.	0.00	0.00	172.80	-216.00	-1151.20	1.0
1 DOE 2.1E	Manhattan West Residential					DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1						
ADSGN: Design Case	SIM: VIDARIS INC.											
REPORT- SV-A	SYSTEM DESIGN PARAMETERS					RETAIL-SYS		WEATHER FILE- NEW YORK CITY TMY2				
SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER		FLOOR AREA (SQFT)		MAX PEOPLE						
RETAIL-SYS	PSZ	1.000		2807.9		56.						
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
2808.	2.425	2.7	0.	0.000	0.0	0.200	94.451	0.669	-151.524	0.26	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
1-RETAIL		2808.	0.	0.000	1.000	562.	0.00	0.00	60.65	-166.79	-60.65	1.0
1 DOE 2.1E	Manhattan West Residential					DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1						
ADSGN: Design Case	SIM: VIDARIS INC.											
REPORT- SV-A	SYSTEM DESIGN PARAMETERS					BOH-SYS		WEATHER FILE- NEW YORK CITY TMY2				
SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER		FLOOR AREA (SQFT)		MAX PEOPLE						

BOH-SYS		PVAVS		1.000		21354.2		94.							
SUPPLY FAN (CFM)		ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)		ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)		
14000.		10.986	2.4	14000.		5.290	1.2	0.200	546.122	0.619	-671.269	0.26	0.37		
ZONE NAME		SUPPLY FLOW (CFM)		EXHAUST FLOW (CFM)		FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER	
C-ELEV-LOBBY		92.		0.		0.000	0.618	18.	0.00	0.00	1.98	-4.96	-3.47	1.0	
C-BOH		583.		0.		0.000	0.618	117.	0.00	0.00	22.02	-31.46	-22.02	1.0	
C-STORAGE		4391.		0.		0.000	0.618	878.	0.00	0.00	165.98	-237.11	-165.98	1.0	
C-OFC		947.		0.		0.000	0.618	189.	0.00	0.00	20.45	-51.13	-35.79	1.0	
C-LOCKER		545.		0.		0.000	0.618	109.	0.00	0.00	11.77	-29.42	-20.59	1.0	
C-CORR		1108.		0.		0.000	0.618	222.	0.00	0.00	25.13	-59.83	-41.88	1.0	
1-MOVE-IN		280.		0.		0.000	0.618	56.	0.00	0.00	10.58	-15.12	-10.58	1.0	
1-BOH		1565.		0.		0.000	0.618	313.	0.00	0.00	59.14	-84.49	-59.14	1.0	
1-PACKAGE		371.		0.		0.000	0.618	74.	0.00	0.00	14.04	-20.06	-14.04	1.0	
1-MAILRM		1486.		0.		0.000	0.618	297.	0.00	0.00	32.09	-80.22	-56.15	1.0	
1-CORR		302.		0.		0.000	0.618	60.	0.00	0.00	6.85	-16.31	-11.42	1.0	
1-OFF		1243.		0.		0.000	0.618	249.	0.00	0.00	26.84	-67.10	-46.97	1.0	
2-CORR		133.		0.		0.000	0.618	27.	0.00	0.00	3.02	-7.20	-5.04	1.0	
2-VEST		144.		0.		0.000	0.618	29.	0.00	0.00	5.46	-7.80	-5.46	1.0	
2-AMENITY-S		769.		0.		0.000	0.618	154.	0.00	0.00	16.62	-25.67	-17.97	1.0	
3-ELEV-LOBBY		42.		0.		0.000	0.618	8.	0.00	0.00	0.91	-1.40	-0.98	1.0	
1 DOE 2.1E				Manhattan West Residential				DOE-2.1E-121		Thu Feb 26 12:00:03		2015SDL RUN		1	
ADSGN: Design Case				SIM: VIDARIS INC.											
REPORT- SV-A				SYSTEM DESIGN PARAMETERS				STAIR-SYS				WEATHER FILE- NEW YORK CITY TMY2			

SYSTEM NAME		SYSTEM TYPE		ALTITUDE MULTIPLIER		FLOOR AREA (SQFT)		MAX PEOPLE							

Manhattan West Residential
SIM: VIDARIS INC.

DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1

STAIR-SYS

WEATHER FILE- NEW YORK CITY TMY2

STAIR-SYS	PVAVS	1.000	52204.8	133.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
13749.	4.131	0.9	0.	0.000	0.0	0.000	542.192	0.627	-505.417	0.25	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
SHAFT		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
C-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
C-TANK		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
1-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
1-VEST		208.	0.	0.000	1.000	0.	0.00	0.00	7.88	-11.25	-7.88	1.0
2-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
2-STORAGE-N		2141.	0.	0.000	1.000	0.	0.00	0.00	80.93	-115.61	-80.93	1.0
3-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
3-MECH		1551.	0.	0.000	1.000	0.	0.00	0.00	58.63	-83.75	-58.63	1.0
4-MECH-W		551.	0.	0.000	1.000	0.	0.00	0.00	20.83	-29.76	-20.83	3.0
4-MECH-E		203.	0.	0.000	1.000	0.	0.00	0.00	7.69	-10.98	-7.69	3.0
4-MECH-N		693.	0.	0.000	1.000	0.	0.00	0.00	26.19	-37.42	-26.19	3.0
4-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	3.0
7-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	26.0
33-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
34-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
34-MECH-E		391.	0.	0.000	1.000	0.	0.00	0.00	14.79	-21.13	-14.79	1.0
34-MECH-NW		969.	0.	0.000	1.000	0.	0.00	0.00	36.62	-52.32	-36.62	1.0
34-MECH-NE		1032.	0.	0.000	1.000	0.	0.00	0.00	39.00	-55.71	-39.00	1.0

35-STAIR	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
36-STAIR	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	15.0
51-STAIR	0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	4.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
 AD SGN: Design Case SIM: VIDARIS INC.

REPORT- SV-A	SYSTEM DESIGN PARAMETERS				STAIR-SYS			WEATHER FILE- NEW YORK CITY TMY2				
(CONTINUED)												
55-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	6.0
61-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
62-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
62-MECH	332.		0.	0.000	1.000	0.	0.00	0.00	12.54	-17.91	-12.54	1.0
62-VEST	37.		0.	0.000	1.000	0.	0.00	0.00	1.41	-2.01	-1.41	1.0
63-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
63-MECH	2555.		0.	0.000	1.000	0.	0.00	0.00	96.59	-137.99	-96.59	1.0
63-VEST	190.		0.	0.000	1.000	0.	0.00	0.00	7.19	-10.27	-7.19	1.0
64-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
64-STORAGE		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0
65-STAIR		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00	1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
 AD SGN: Design Case SIM: VIDARIS INC.

REPORT- SV-A SYSTEM DESIGN PARAMETERS						AC-B1-1-5		WEATHER FILE- NEW YORK CITY TMY2					
SYSTEM NAME		SYSTEM TYPE		ALTITUDE MULTIPLIER		FLOOR AREA (SQFT)		MAX PEOPLE					
AC-B1-1-5		PVAVS		1.000		7179.0		7.					
SUPPLY FAN (CFM)		ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)		ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)
22815.		14.867	2.0	3700.		1.524	1.3	0.001	400.867	1.415	-813.327	0.31	0.37
ZONE NAME		SUPPLY FLOW (CFM)		EXHAUST FLOW (CFM)		FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR) MULTIPLIER

C-MECH	14585.	0.	0.000	1.000	15.	0.00	0.00	551.30	-787.57	-551.30	1.0
C-TELE	828.	0.	0.000	1.000	1.	0.00	0.00	31.31	-44.73	-31.31	1.0
C-ELEC	7402.	0.	0.000	1.000	7.	0.00	0.00	279.80	-399.71	-279.80	1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
 AD SGN: Design Case SIM: VIDARIS INC.
 REPORT- SV-A SYSTEM DESIGN PARAMETERS AC-1-1 WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
AC-1-1	PVAVS	1.000	273.0	2.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
2500.	1.667	2.1	0.	0.000	0.0	0.200	57.284	0.930	-122.804	0.30	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR) MULTIPLIER	
1-SECURITY		2500.	0.	0.000	1.000	500.	0.00	0.00	54.00	-135.00	-109.70 1.0	

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
 AD SGN: Design Case SIM: VIDARIS INC.
 REPORT- SV-A SYSTEM DESIGN PARAMETERS AC-36-1-4 WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
AC-36-1-4	PVAVS	1.000	2182.1	2.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
5850.	3.333	1.8	0.	0.000	0.0	0.001	136.467	1.061	-210.145	0.36	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR) MULTIPLIER	
35-ELEC		1000.	0.	0.000	1.000	1.	0.00	0.00	37.79	-53.98	-37.79 1.0	
35-TANK		0.	0.	0.000	0.000	0.	0.00	0.00	0.00	0.00	0.00 1.0	

35-EMR 4850. 0. 0.000 1.000 5. 0.00 0.00 183.34 -261.92 -183.34 1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
ADSGN: Design Case SIM: VIDARIS INC.
REPORT- SV-A SYSTEM DESIGN PARAMETERS EMR-SYS WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
EMR-SYS	PVAVS	1.000	1249.6	1.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
5876.	2.425	1.3	0.	0.000	0.0	0.001	144.468	0.997	-214.172	0.26	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
64-EMR		3780.	0.	0.000	1.000	4.	0.00	0.00	142.87	-204.10	-142.87	1.0
65-EMR		2097.	0.	0.000	1.000	2.	0.00	0.00	79.26	-113.23	-79.26	1.0

1 DOE 2.1E Manhattan West Residential DOE-2.1E-121 Thu Feb 26 12:00:03 2015SDL RUN 1
ADSGN: Design Case SIM: VIDARIS INC.
REPORT- SV-A SYSTEM DESIGN PARAMETERS SALLY-SYS WEATHER FILE- NEW YORK CITY TMY2

SYSTEM NAME	SYSTEM TYPE	ALTITUDE MULTIPLIER	FLOOR AREA (SQFT)	MAX PEOPLE								
SALLY-SYS	PVAVS	1.000	660.0	4.								
SUPPLY FAN (CFM)	ELEC (KW)	DELTA-T (F)	RETURN FAN (CFM)	ELEC (KW)	DELTA-T (F)	OUTSIDE AIR RATIO	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	HEATING CAPACITY (KBTU/HR)	COOLING EIR (BTU/BTU)	HEATING EIR (BTU/BTU)	
3054.	1.341	1.4	3054.	1.110	1.1	0.134	76.949	0.820	-138.448	0.29	0.37	
ZONE NAME		SUPPLY FLOW (CFM)	EXHAUST FLOW (CFM)	FAN (KW)	MINIMUM FLOW RATIO	OUTSIDE AIR FLOW (CFM)	COOLING CAPACITY (KBTU/HR)	SENSIBLE (SHR)	EXTRACTION RATE (KBTU/HR)	HEATING CAPACITY (KBTU/HR)	ADDITION RATE (KBTU/HR)	MULTIPLIER
1-SALLYPORT		3054.	0.	0.000	1.000	409.	0.00	0.00	65.96	-164.89	-115.42	1.0

EQUIPMENT	NUMBER			NUMBER			NUMBER			NUMBER			NUMBER		
	SIZE	INST	AVAIL	SIZE	INST	AVAIL	SIZE	INST	AVAIL	SIZE	INST	AVAIL	SIZE	INST	AVAIL
	(MBTU/H)			(MBTU/H)			(MBTU/H)			(MBTU/H)			(MBTU/H)		
HW-BOILER	6.973	3	3												
DHW-HEATER	1.805	1	1												

EQUIPMENT	HOURS AT PERCENT PART LOAD RATIO												TOTAL	ANNUAL	FALSE	ELEC	THERMAL											
													HOURS	LOAD	LOAD	USED	USED											
	0	--	10	--	20	--	30	--	40	--	50	--	60	--	70	--	80	--	90	--	100	-	110+	-----	-----	-----	-----	-----
HW-BOILER	1452		612		437		399		303		660		547		441		334		255		0		0	5440	18523.0	0.0	39268.	23607.8
	2501		995		872		601		323		101		30		14		3		0		0		0					
DHW-HEATER	2338		217		0		0		918		2001		1248		1037		548		360		93		93	8760	7690.6	0.0	18529.	7616.1
	2338		217		0		0		918		2001		1248		1037		548		360		93		93					

HOT LOOP CIRCULATION PUMP ELECTRICAL USE = 20552. KWH
 COLD LOOP CIRCULATION PUMP ELECTRICAL USE = 0. KWH
 CONDENSER WATER PUMP ELECTRICAL USE = 0. KWH
 TOWER OR CONDENSER FAN ELECTRICAL USE = 0. KWH

NOTES TO TABLE

- 1) THE FIRST PART LOAD ENTRY FOR EACH PIECE OF EQUIPMENT IS THE HOURLY LOAD DIVIDED BY THE HOURLY OPERATING CAPACITY
- 2) THE SECOND PART LOAD ENTRY FOR EACH PIECE OF EQUIPMENT IS THE HOURLY LOAD DIVIDED BY THE TOTAL INSTALLED CAPACITY

ADSGN: Design Case
REPORT- PS-D PLANT LOADS SATISFIED

SIM: VIDARIS INC.

WEATHER FILE- NEW YORK CITY TMY2

HEATING LOADS	MBTU SUPPLIED	PCT OF TOTAL LOAD
-----	-----	-----
HW-BOILER	18523.0	70.7
DHW-HEATER	7690.6	29.3
	=====	=====
LOAD SATISFIED	26213.6	100.0
TOTAL LOAD ON PLANT	26214.0	

ELECTRICAL LOADS	KWH SUPPLIED	PCT OF TOTAL LOAD
-----	-----	-----
ELECTRICITY	5562548.0	100.0
	=====	=====
LOAD SATISFIED	5562548.0	100.0
TOTAL LOAD ON PLANT	5562557.0	

1 DOE 2.1E

ADSGN: Design Case

REPORT- PS-D PLANT LOADS SATISFIED

Manhattan West Residential

SIM: VIDARIS INC.

DOE-2.1E-121 Thu Feb 26 12:00:03 2015PDL RUN 1

WEATHER FILE- NEW YORK CITY TMY2

----- (CONTINUED) -----

SUMMARY OF LOADS MET

TYPE OF LOAD	TOTAL LOAD (MBTU)	LOAD SATISFIED (MBTU)	TOTAL OVERLOAD (MBTU)	PEAK OVERLOAD (MBTU)	HOURS OVERLOADED
-----	-----	-----	-----	-----	-----
HEATING LOADS	26214.0	26213.6	0.000	0.000	0
ELECTRICAL LOADS	18984.8	18984.8	0.000	0.000	0

OELECTRICAL END-USES IN KWH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
0 AREA LIGHTS	82614.	74640.	82680.	80007.	82614.	80007.	82636.	82658.	79985.	82614.	79963.	82636.	973054.
MAX KW	155.5	155.5	155.5	155.5	155.5	155.5	155.5	155.5	155.5	155.5	155.5	155.5	155.5
DAY/HR	4/19	1/19	1/19	1/19	3/19	1/19	1/19	2/19	1/19	1/19	1/19	1/19	
0MISC EQUIPMT	176904.	159789.	176925.	171216.	176904.	171216.	176910.	176920.	171206.	176904.	171197.	176905.	2082998.
MAX KW	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5
DAY/HR	4/18	1/18	1/18	1/18	3/18	1/18	1/18	2/18	1/18	1/18	1/18	1/18	
0 SPACE HEAT	12812.	9233.	7841.	4505.	697.	0.	0.	0.	0.	2073.	5904.	9763.	52829.
MAX KW	45.1	44.5	29.1	23.8	22.3	0.0	0.0	0.0	0.0	19.8	27.7	41.5	45.1
DAY/HR	18/ 7	4/ 7	23/ 7	5/ 7	7/ 7	0/ 0	0/ 0	0/ 0	0/ 0	30/ 7	16/ 7	25/21	
0 SPACE COOL	9505.	8188.	8846.	11977.	41801.	103900.	174657.	137983.	84410.	15281.	4352.	8566.	609466.
MAX KW	36.5	31.3	63.0	252.6	692.7	849.7	1039.2	731.7	794.1	256.6	37.9	37.9	1039.2
DAY/HR	23/ 7	4/ 6	25/15	30/17	10/16	16/17	1/17	27/17	6/ 9	9/16	16/ 6	12/ 6	
0PUMPS & MISC	3344.	2978.	3226.	2985.	1374.	0.	0.	0.	5.	2863.	3045.	3253.	23074.
MAX KW	7.0	7.1	5.5	4.5	4.5	0.0	0.0	0.0	0.8	4.5	5.1	6.5	7.1
DAY/HR	22/21	4/ 9	6/ 9	13/21	6/20	0/ 0	0/ 0	0/ 0	20/ 2	1/21	15/21	24/21	
0 VENT FANS	213165.	192114.	137918.	121010.	86938.	95582.	121557.	108730.	83176.	102626.	120837.	211688.	1595341.
MAX KW	305.0	305.4	305.2	299.4	297.5	281.1	282.3	281.0	281.1	282.3	294.8	304.7	305.4
DAY/HR	29/ 7	4/ 7	22/ 7	2/ 7	10/16	16/17	16/19	31/17	7/17	18/ 7	30/ 7	25/ 7	
0DOMHOT WATER	1574.	1421.	1574.	1523.	1574.	1523.	1574.	1574.	1523.	1574.	1523.	1574.	18528.
MAX KW	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
DAY/HR	1/ 1	1/ 1	1/ 1	1/ 1	1/ 2	1/ 2	1/ 2	1/ 2	1/ 2	1/ 2	1/ 1	1/ 1	
0 EXT LIGHTS	270.	224.	243.	235.	226.	197.	216.	238.	235.	243.	251.	282.	2859.
MAX KW	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
DAY/HR	1/ 1	1/ 1	1/ 1	1/ 1	1/ 2	1/ 2	1/ 2	1/ 2	1/ 2	1/ 2	1/ 1	1/ 1	
0 EXT MISC	17360.	15680.	17360.	16800.	17360.	16800.	17360.	17360.	16800.	17360.	16800.	17360.	204400.
MAX KW	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
DAY/HR	1/18	1/18	1/18	1/18	1/18	1/18	1/18	1/18	1/18	1/18	1/18	1/18	
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
0 TOTAL KWH	517548.	464268.	436611.	410257.	409488.	469226.	574910.	525462.	437340.	401538.	403873.	512028.	5562548.

----- (CONTINUED) -----

OFUEL END-USES IN MBTU

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
0 SOURCE USES	72.8	65.8	72.8	70.5	72.8	70.5	72.8	72.8	70.5	72.8	70.5	72.8	857.3
MAX MBTU	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202	0.202
DAY/HR	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	1/ 9	
0 SPACE HEAT	6266.0	4490.7	3734.1	1996.7	278.9	0.0	0.0	0.0	0.0	871.7	2634.0	4790.6	25062.9
MAX MBTU	23.308	23.380	17.921	13.969	12.775	0.000	0.000	0.000	0.000	12.061	16.189	21.084	23.380
DAY/HR	22/21	4/ 9	6/ 9	2/ 9	7/ 7	0/ 0	0/ 0	0/ 0	0/ 0	30/ 9	15/21	24/21	

ODOMHOT WATER	717.8	675.3	750.1	712.1	679.3	603.5	575.9	545.9	525.8	567.7	594.4	668.0	7616.0
MAX MBTU	1.779	1.854	1.860	1.824	1.681	1.540	1.420	1.345	1.338	1.400	1.517	1.653	1.860
DAY/HR	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	1/ 8	
=====													
0 TOTAL MBTU	7056.7	5231.8	4557.0	2779.3	1031.1	674.0	648.7	618.7	596.3	1512.3	3298.9	5531.5	33536.3
1 DOE 2.1E	Manhattan West Residential						DOE-2.1E-121 Thu Feb 26 12:00:03 2015PDL RUN 1						
ADSGN: Design Case				SIM: VIDARIS INC.									
REPORT- PS-H EQUIPMENT USE STATISTICS										WEATHER FILE- NEW YORK CITY TMY2			

E Q U I P M E N T	AVG	MAX	MON		SIZE OPER		SIZE OPER		SIZE OPER		SIZE OPER	
	OPER	LOAD	DAY	HR	(MBTU)	HRS	(MBTU)	HRS	(MBTU)	HRS	(MBTU)	HRS
-----	RATIO	(MBTU)	---	---	-----	-----	-----	-----	-----	-----	-----	-----
HW-BOILER	0.421	17.699	2	4 9	6.973	6304						
DHW-HEATER	0.487	1.805	3	31 19	1.805	8760						

ADSGN: Design Case

SIM: VIDARIS INC.

REPORT- BEPS BUILDING ENERGY PERFORMANCE SUMMARY

WEATHER FILE- NEW YORK CITY TMY2

ENERGY TYPE:	ELECTRICITY	NATURAL-GAS
UNITS: MBTU		
CATEGORY OF USE		

AREA LIGHTS	3321.1	0.0
MISC EQUIPMT	7109.3	0.0
SOURCE USES	0.0	857.3
SPACE HEAT	180.3	25063.0
SPACE COOL	2080.1	0.0
PUMPS & MISC	78.7	0.0
VENT FANS	5444.8	0.0
DOMHOT WATER	63.2	7616.1
EXT LIGHTS	9.8	0.0
EXT MISC	697.6	0.0
	-----	-----
TOTAL	18985.0	33536.4

TOTAL SITE ENERGY	52521.41 MBTU	69.1 KBTU/SQFT-YR GROSS-AREA	69.1 KBTU/SQFT-YR NET-AREA
TOTAL SOURCE ENERGY	90497.06 MBTU	119.1 KBTU/SQFT-YR GROSS-AREA	119.1 KBTU/SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE	=	1.9
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED	=	0.0

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

ADSGN: Design Case

SIM: VIDARIS INC.

REPORT- BEPU BUILDING ENERGY PERFORMANCE SUMMARY (UTILITY UNITS)

WEATHER FILE- NEW YORK CITY TMY2

ENERGY TYPE: SITE UNITS:	ELECTRICITY KWH	NATURAL-GAS THERM
CATEGORY OF USE -----		
AREA LIGHTS	973089.	0.
MISC EQUIPMT	2083012.	0.
SOURCE USES	0.	8573.
SPACE HEAT	52828.	250630.
SPACE COOL	609467.	0.
PUMPS & MISC	23073.	0.
VENT FANS	1595336.	0.
DOMHOT WATER	18529.	76161.
EXT LIGHTS	2859.	0.
EXT MISC	204406.	0.
	-----	-----
TOTAL	5562598.	335364.

TOTAL ELECTRICITY	5562598. KWH	7.318 KWH	/SQFT-YR GROSS-AREA	7.318 KWH	/SQFT-YR NET-AREA
TOTAL NATURAL-GAS	335364. THERM	0.441 THERM	/SQFT-YR GROSS-AREA	0.441 THERM	/SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 1.9
 PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.0

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

ADSGN: Design Case

SIM: VIDARIS INC.

REPORT- ES-D ENERGY COST SUMMARY

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UTILITY-RATE      RESOURCE      METERS      METERED
                  ELECTRICITY      ENERGY
                  NATURAL-GAS      UNITS/YR
-----
OSC8-ELEC-TARIFF    1 2 3 4 5      5562548. KWH      1305860.
OSC3-GAS-TARIFF     1 2 3 4      335363. THERM     378092.
0
0
=====
1683952.
```

ENERGY COST/GROSS BLDG AREA: 2.22

ENERGY COST/NET BLDG AREA: 2.22