

**PANEL: BATTERY INTERTER - 8 CIRCUIT**

LOCATION: JANITOR 305      VOLTS: 120/208 Wye      A.I.C. RATING:      BUS RATING: 30 A  
SUPPLY FROM:      PHASE: 3      MAIN CB: 30 A  
MOUNTING: SURFACE      WIRE: 4

ENCLOSURE: Type 1

CKT	CIRCUIT DESCRIPTION	LC	CT	TRIP	POLES	A	B	C	POLES	TRIP	CT	LC	CIRCUIT DESCRIPTION	CKT
1	EMERGENCY LIGHTS - 1ST FLOOR	Power	12	20 A	1	0.30...	0.29...			1	20 A	13	Power	EMERGENCY LIGHTS - 2ND FLOOR
3	EMERGENCY LIGHTS - 3RD FLOOR	Power	6	20 A	1		0.14...							
5														
7														
9														
11														
<b>TOTAL LOAD:</b>						0.59 kVA	0.14 kVA	0.00 kVA						
<b>TOTAL AMPS:</b>						5 A	1 A	0 A						
<b>LOAD CLASSIFICATION</b>		<b>CONNECTED LOAD</b>	<b>DEMAND FACTOR</b>	<b>ESTIMATED DEMAND</b>	<b>PANEL TOTALS</b>									
Power		0.73 kVA	100.00%	0.73 kVA	<b>TOTAL CONN. LOAD:</b> 0.73 kVA		<b>TOTAL EST. DEMAND:</b> 0.73 kVA		<b>TOTAL CONN.:</b> 2 A					
					<b>TOTAL EST. DEMAND:</b> 2 A									

**NOTES:**  
USE 2#12CU + 1#12G IN 3/4" FOR 20A/1P BREAKER U.O.N  
BATTERY INVERTER SHALL BE PAD MOUNTED ON 3" PAD  
ISOLITE 1.6kVA 1PHASE 120V NORMALLY OFF BREAKERS, WITH TRIP ALARM AND EXTENDED BATTERY WARRANTY (32W x 14D X 55H) - E3MAC-1600-1P-1A/OA-OA --TA-FS-EB-EW

**PANEL: MDP**

LOCATION: KITCHEN 114      VOLTS: 480/277 Wye      A.I.C. RATING: 65000      BUS RATING: 800 A  
SUPPLY FROM:      PHASE: 3      MAIN CB: 800 A  
MOUNTING: SURFACE      WIRE: 4

ENCLOSURE: Type 1

CKT	CIRCUIT DESCRIPTION	LC	CT	TRIP	POLES	A	B	C	POLES	TRIP	CT	LC	CIRCUIT DESCRIPTION	CKT
1	PANEL 'H1'	Other...	1	225 A	3	32.82...	82.85...						PANEL H3	2
3							33.41...	82.85...						
7								29.74...	81.89...					
9														
11														
13														
15														
17														
19														
21														
23														
25														
27														
29														
<b>TOTAL LOAD:</b>						115.67 kVA	116.22 kVA	111.60 kVA						
<b>TOTAL AMPS:</b>						420 A	422 A	403 A						
<b>LOAD CLASSIFICATION</b>		<b>CONNECTED LOAD</b>	<b>DEMAND FACTOR</b>	<b>ESTIMATED DEMAND</b>	<b>PANEL TOTALS</b>									
Lighting		14.14 kVA	125.00%	17.67 kVA	<b>TOTAL CONN. LOAD:</b> 343.49 kVA		<b>TOTAL EST. DEMAND:</b> 284.97 kVA		<b>TOTAL CONN.:</b> 413 A					
Motor		47.34 kVA	117.34%	55.55 kVA	<b>TOTAL EST. DEMAND:</b> 284.97 kVA									
Other		2.74 kVA	100.00%	2.74 kVA	<b>TOTAL CONN.:</b> 413 A									
Power		20.12 kVA	100.00%	20.12 kVA	<b>TOTAL EST. DEMAND:</b> 343 A									
Receptacle		39.00 kVA	62.82%	24.50 kVA										
Appliance		8.60 kVA	75.00%	6.45 kVA										
Mechanical - Cooling		163.00 kVA	67.00%	109.21 kVA										

**NOTES:**  
PROVIDE BOARD SIMILAR TO SQUARE D - HCM (32W X 9D)  
PROVIDE TYPE I AND II SPD'S  
PROVIDE POWER METER SIMILAR TO ION 8600

**Branch Panel: 1H**

Location: KITCHEN 114      Volts: 480/277 Wye      A.I.C. Rating: 35000      Mains Type: MCB  
Supply From: MDP      Phases: 3      Wires: 4      MCB Rating: 400 A  
Mounting: SURFACE      Enclosure: Type 1

**Notes:**

CKT	Circuit Description	Tripp	Poles	A	B	C	Poles	Tripp	Circuit Description	CKT
1	LIGHTING: FIRST FLOOR SOUTH	20 A	1	2.16 kVA	0.89 kVA				LIGHTING: FIRST FLOOR LOBBY/NORTH	2
3	LIGHTING: FIRST FLOOR EXTERIOR EGRESS/CANOPY	20 A	1		0.97 kVA	3.12 kVA		1	20 A	4
5	LIGHTING: SECOND FLOOR NORTH/205/206	20 A	1			2.41 kVA	0.70 kVA	1	20 A	6
7	Lighting	20 A	1	0.37 kVA				1	20 A	8
9										10
11										12
13										14
15										16
17										18
19										20
21										22
23										24
25										26
27										28
29										30
31										32
33										34
35										36
37	PANEL 1L - VIA TRANSFORMER 'TL1'	100 A	3	12.79...	16.77...			3	100 A	38
39					13.48...	15.97...				40
41						9.88 kVA	16.88...			42
<b>Total Load:</b>				32.82 kVA	33.41 kVA	29.74 kVA				
<b>Total Amps:</b>				120 A	122 A	107 A				

**Legend:**

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	11.58 kVA	125.00%	14.47 kVA	<b>Total Conn. Load:</b> 95.96 kVA <b>Total Est. Demand:</b> 84.56 kVA <b>Total Conn.:</b> 115 A <b>Total Est. Demand:</b> 102 A
Motor	20.07 kVA	106.11%	21.30 kVA	
Other	1.40 kVA	100.00%	1.40 kVA	
Power	16.86 kVA	100.00%	16.86 kVA	
Receptacle	37.06 kVA	63.49%	23.53 kVA	
Appliance	8.60 kVA	75.00%	6.45 kVA	

**Notes:**  
USE 2#12CU + 1#12G IN 3/4" FOR 20A/1P BREAKER U.O.N  
\*GFI BREAKER  
\*\*NON-COINCIDENT LOADS (LARGER OF TWO CALCULATED)

**PANEL: 1L**

LOCATION: KITCHEN 114      VOLTS: 120/208 Wye      A.I.C. RATING:      BUS RATING: 225 A  
SUPPLY FROM: 11L      PHASE: 3      MAIN CB: 150 A  
MOUNTING: SURFACE      WIRE: 4

ENCLOSURE: Type 1

CKT	CIRCUIT DESCRIPTION	LC	TRIP	POLES	A	B	C	POLES	TRIP	LC	CIRCUIT DESCRIPTION	CKT		
1	(3) RECEPTACLES: CLASSROOM 105	Receptacle	20 A	1	0.54 kVA	0.72 kVA			1	20 A	Receptacle	(4) RECEPTACLES: FLOOR 1 ACTIVITY 109	2	
3	MINI REF / MICROWAVE - 105	Receptacle	20 A	1		1.50 kVA	0.72 kVA		1	20 A	Receptacle	(4) RECEPTACLES: FLOOR 1 ACTIVITY 109	4	
5	(3) RECEPTACLES: CLASSROOM 105/COUNTER LED	Receptacle	20 A	1			0.54 kVA	0.54 kVA	1	20 A	Receptacle	(3) RECEPTACLES: CLASSROOM 110	6	
7	(3) RECEPTACLES: CLASSROOM 106	Receptacle	20 A	1	0.54 kVA	1.50 kVA			1	20 A	Power	MINI REF / MICROWAVE - 110	8	
9	MINI REF / MICROWAVE - 106	Receptacle	20 A	1		1.50 kVA	0.36 kVA		1	20 A	Receptacle	(2) RECEPTACLES: CLASSROOM 110/COUNTER LED	10	
11	(3) RECEPTACLES: CLASSROOM 106/COUNTER LED	Receptacle	20 A	1			0.54 kVA	0.54 kVA	1	20 A	Receptacle	(3) RECEPTACLES: CLASSROOM 111	12	
13	(3) RECEPTACLES: CLASSROOM 107	Receptacle	20 A	1	0.54 kVA	1.50 kVA			1	20 A	Power	MINI REF / MICROWAVE - 111	14	
15	MINI REF / MICROWAVE - 107	Power	20 A	1		1.50 kVA	0.36 kVA		1	20 A	Receptacle	(2) RECEPTACLES: CLASSROOM 111/COUNTER LED	16	
17	(3) RECEPTACLES: CLASSROOM 107/COUNTER LED	Receptacle	20 A	1			0.54 kVA	0.36 kVA	1	20 A	Receptacle	(2) RECEPTACLES: LOBBY 101	18	
19	(3) RECEPTACLES: CLASSROOM 108	Receptacle	20 A	1	0.54 kVA	0.54 kVA			1	20 A	Receptacle	(3) RECEPTACLES: OFFICE 102	20	
21	MINI REF / MICROWAVE - 108	Power	20 A	1		1.50 kVA	0.54 kVA		1	20 A	Receptacle	(3) RECEPTACLES: DIRECTOR 103	22	
23	(3) RECEPTACLES: CLASSROOM 108/COUNTER LED	Receptacle	20 A	1			0.54 kVA	0.72 kVA	1	20 A	Receptacle	(4) RECEPTACLES: FLOOR 1 HALLWAY	24	
25	IRRIGATION CONTROLLER	Power	20 A	1	0.50 kVA	0.80 kVA			1	20 A	EDF [GFI BREAKER]	LIGHTING: FIRST FLOOR ATRIUM	26	
27	LIGHTING: FIRST FLOOR COORIDOR	Lighting	20 A	1		0.71 kVA	0.25 kVA		1	20 A	Lighting	FACP	28	
29							0.50 kVA		1	20 A	Power		30	
31													32	
33	LIGHTING: EXTERIOR	Lighting	20 A	1		0.18 kVA							34	
35	Power	Power	20 A	1			0.18 kVA						36	
37													38	
39													40	
41	SUMP PUMP [NEMA 6-20R]	Power	20 A	2			1.50 kVA						42	
43					1.50 kVA								44	
45													46	
47													48	
49	RECEPTACLE - ELEV. PIT AND LIGHT	Receptacle	20 A	1	0.22 kVA								50	
51	(1) RECEPTACLE: KITCHEN COUNTERTOP	Power	20 A	1		0.36 kVA							52	
53	(1) RECEPTACLE: KITCHEN COUNTERTOP	Power	20 A	1			0.18 kVA						54	
55	(1) RECEPTACLE: KITCHEN REFRIGERATOR [GFI...]	Power	20 A	1	0.80 kVA								56	
57	(1) RECEPTACLE: KITCHEN REFRIGERATOR [GFI...]	Power	20 A	1		0.80 kVA							58	
59													60	
61													62	
63	VAV'S - 1ST FLOOR	Other	20 A	1		0.20 kVA							64	
65	VRF-1-8 - 30AS/NF/2P/N1 - DIRECTOR 103	Motor	20 A	2			0.50 kVA						66	
67					0.50 kVA								68	
69	VRF-1-4 - 30AS/NF/2P/N1 - CLASSROOM 105	Motor	20 A	2		0.50 kVA	0.50 kVA		2	20 A	Motor	VRF-1-9 - 30AS/NF/2P/N1 - ACTIVITY	70	
71							0.50 kVA	0.50 kVA					72	
73	VRF-1-5 - 30AS/NF/2P/N1 - CLASSROOM 106	Motor	20 A	2	0.50 kVA	0.70 kVA			2	20 A	Motor	VRF-1-1 & VRF-1-10 - 30AS/15AF/2P/N1 - ELEC 115 /...	74	
75						0.50 kVA	0.70 kVA						76	
77	VRF-1-6 - 30AS/NF/2P/N1 - CLASSROOM 107	Motor	20 A	2			0.50 kVA	0.35 kVA		2	20 A	Motor	VRF-1-3 - 30AS/NF/2P/N1 - CLASSROOM 110	78
79					0.50 kVA	0.35 kVA							80	
81	VRF-1-7 - 30AS/NF/2P/N1 - CLASSROOM 108	Motor	20 A	2		0.50 kVA	0.35 kVA		2	20 A	Motor	VRF-1-2 - 30AS/NF/2P/N1 - CLASSROOM 111	82	
83							0.50 kVA	0.35 kVA					84	
<b>TOTAL LOAD:</b>					12.79 kVA	13.48 kVA	9.88 kVA							
<b>TOTAL AMPS:</b>					110 A	116 A	82 A							
<b>LOAD CLASSIFICATION</b>		<b>CONNECTED LOAD</b>	<b>DEMAND FACTOR</b>	<b>ESTIMATED DEMAND</b>	<b>PANEL TOTALS</b>									
Lighting		1.00 kVA	125.00%	1.25 kVA	<b>TOTAL CONN. LOAD:</b> 36.14 kVA		<b>TOTAL EST. DEMAND:</b> 35.36 kVA		<b>TOTAL CONN.:</b> 100 A					
Motor		8.80 kVA	102.84%	9.05 kVA	<b>TOTAL EST. DEMAND:</b> 35.36 kVA									
Other		0.20 kVA	100.00%	0.20 kVA	<b>TOTAL CONN.:</b> 100 A									
Power		13.40 kVA	100.00%	13.40 kVA	<b>TOTAL EST. DEMAND:</b> 98 A									
Receptacle		12.62 kVA	89.62%	11.31 kVA										

**NOTES:**  
USE 2#12CU + 1#12G IN