

LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
PANELBOARD FEEDER: SEE SINGLE LINE DIAGRAM
FEED FROM: UTILITY

MDP - MAIN PANEL
RATED FOR
SERVICE ENTRANCE

SERVICE: 208/120V, 3ø, 4WIRE, 60HZ
AIC (MIN.): 42KAIC
MAINS: 600A MAIN BREAKER W/GND FAULT
NEUTRAL: YES
SURGE PROTECTION DEVICE: INTEGRAL TO PANEL

WIRE / CABLE DESCRIPTION	CKT NO.	BKR SIZE	POLES	KVA	LOAD DESCRIPTION	A	B	C	LOAD DESCRIPTION	KVA	POLES	BKR SIZE	CKT NO.	WIRE / CABLE DESCRIPTION	
SEE SINGLE LINE DIAGRAM	1			14.40	PANEL L	35.1			ATS (PANEL C)	20.87			2	SEE SINGLE LINE DIAGRAM	
	3	225	3	13.53			34.5				21.05	3	225	4	
	5			12.62				33.4			20.56			6	
	7			4.65			5.4				0.47			8	
2#12 & 1#12 GND IN 1" C	9	50	3	4.95		DOAS-1	5.4	5.4			0.47	3	15	10	3#12 & 1#12GND IN 3/4" C
	11			1.95				5.4	0.47			12			
	13			3.35	FPT-1	4.4			1.00			14			
	17			3.35					1.00			16			
3#10 & 1#10 GND IN 3/4" C	19	30	3	3.35				4.4	1.00	2	15	18	2#12 & 1#12GND IN 3/4" C		
	21			1.90	FPT-2	2.9			1.00			20			
	23			1.90				4.5	2.80	2	35	22	2#12 & 1#12GND IN 3/4" C		
	25			3.77					0.00			24	2#12 & 1#10GND IN 1" C		
3#12 & 1#12 GND IN 3/4" C	27	35	3	3.77	FPT-3	3.8			0.00	3	20	28			
	29			3.77				3.8	0.00			30			
	31			2.10					0.00			32			
3#12 & 1#12 GND IN 3/4" C	33	20	3	2.10	FPT-4	2.1			0.00	3		34			
	35			2.10				2.1	0.00			36			
	37			3.15					0.00			38			
3#10 & 1#10 GND IN 3/4" C	39	30	3	3.15	FPT-5	3.2			0.00	3		40			
	41			3.15				3.2	0.00			42			
						Total (KVA):	171								
LOAD TYPES:						KVA		AMPS							
LIGHTING:						7.35		8.2							
LARGEST MOTOR:						18.00		22.5							
ADDITIONAL MOTORS:						36.15		36.2							
RECEPTACLES:						22.26	0.5	18.1							
HVAC:						23.96	0.9	21.5							
ELECTRIC SPACE HEATING:						53.85	1	53.9							
KITCHEN:						2.58	0.9	2.3							
MISCELLANEOUS:						7.24	0.6	4.3							

NOTES:
* INDICATES CLASS A, 5ma GFCI BREAKER (PERSONNEL PROTECTION).
** INDICATES 30ma GFCI BREAKER (GPE, EQUIPMENT PROTECTION).
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE RATED MID.
ALL CIRCUIT BREAKERS FOR LIGHTING SHALL BE RATED SWD.
1. E.C. SHALL VERIFY ALL CIRCUITS AND PROVIDE AN UPDATED PANEL SCHEDULE.
2. NOT USED.
3. AFTER PROJECT IS COMPLETED E.C. SHALL PROVIDE AMPERE READINGS FOR EACH FEEDER BREAKER AND FOR THE MAIN PANEL TO THE ENGINEER.

LOCATION: GROUND FLOOR MAIN ELECTRICAL ROOM
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
PANELBOARD FEEDER: SEE SINGLE LINE DIAGRAM
FEED FROM: MDP

PANEL L

SERVICE: 208/120V, 3ø, 4WIRE, 60HZ
AIC (MIN.): 42KAIC
MAINS: 225A MAIN BREAKER
NEUTRAL: YES

WIRE / CABLE DESCRIPTION	CKT NO.	BKR SIZE	POLES	KVA	LOAD DESCRIPTION	A	B	C	LOAD DESCRIPTION	KVA	POLES	BKR SIZE	CKT NO.	WIRE / CABLE DESCRIPTION
2#12 & 1#12 GND IN 3/4" C	1	20	1	1.37	LIGHTING APPERATUS BAY	2.85			LIGHTING 2ND FLOOR	1.49	1	20	2	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	3	20	1	0.27	LIGHTING UTILITY AREA		1.45		LIGHTING OPERATIONS SIDE	1.18	1	20	4	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	5	20	1	0.65	OUTSIDE BUILDING			1.01	ROOF TOP RECEPTACLES	0.36	1	20	6	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	7	20	1	0.30	EF-6 ROOF	0.84			LOUNGE CREDENZA RECEPTACLES	0.54	1	20	8	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	9	30	1	0.30	EF-7 ROOF			1.02	DAY ROOM AREA RECEPTACLES	0.72	1	20	10	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	11	20	1	0.72	CLEAN ROOM & EXTERIOR RCPTS			1.08	REST ROOMS RECEPTACLES	0.36	1	20	12	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	13	20	1	0.72	STORAGE & EXTERIOR RCPTS	1.26			KITCHEN ISLAND RECEPTACLES	0.54	1	20	14	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	15	20	1	0.54	BAY RECEPTACLES		1.26		PANTRY RECEPTACLES	0.72	1	20	16	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	17	20	1	0.72	BAY RECEPTACLES			1.08	JUNCTION BOX ISLAND	0.36	1	20	18	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	19	20	1	0.72	WATCH DESK RECEPTACLES	1.68			SPARE	0.96	1	20	20	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	21	20	1	0.72	WATCH DESK RECEPTACLES		1.68		SPARE	0.96	1	20	22	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	23	20	1	0.54	LOBBY LOUNGE AREA RCPTS			0.90	SPARE	0.96	1	20	24	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	25	20	1	0.54	EXERCISE & MECH ROOMS RCPTS	0.54			SPARE	0.96	1	20	26	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	27	20	1	0.54	EXERCISE ROOM & PATIO RCPTS		0.54		SPARE	0.96	1	20	28	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	29	20	1	0.36	TV RCPT LOUNGE & FRONT LOBBY			0.36	KH-1 KITCHEN HOOD	0.60	1	30	30	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	31	20	1	0.36	FRONT EXTERIOR RECEPTACLES	1.56			MICROWAVE	1.20	1	30	32	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	33	20	1	0.36	CORD REELS - APPARATUS BAY		1.07		DISHWASHER	1.05	1	20	34	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	35	20	1	0.36	CORD REELS - APPARATUS BAY			0.36	SPARE	0.96	1	20	36	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	37	20	1	0.54	KITCHEN COUNTER RECEPTACLES	0.54			SPARE	0.96	1	20	38	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	39	20	1	0.50	EXTERIOR SIGNAGE		0.50		SPARE	0.96	1	20	40	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	41	20	1	0.18	IT ROOM 2ND LEVEL RECEPTACLE			0.18	SPARE	0.96	1	20	42	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	43	20	1	0.72	BUNK ROOMS 1 & 2 RECEPTACLES	0.90			TV REFRIG 2ND LEVEL LOUNGE	0.18	1	20	44	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	45	20	1	0.72	BUNK ROOMS 3 & 4 RECEPTACLES		1.62		CORD REELS 2ND LEVEL RECEPTACLE	0.90	1	20	46	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	47	20	1	0.72	BUNK ROOMS 5 & 6 RECEPTACLES			1.50	BUNK ROOMS 5, 6, 7 RECEPTACLES	1.08	1	20	48	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	49	20	1	0.18	IT CLOSET 2ND LEVEL RCPTS	0.18			MECH CLOSET & BALCONY RCPTS.	0.36	1	20	50	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	51	20	1	0.36	BATHROOM RECEPTACLES		0.36		SPARE	0.96	1	20	52	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	53	20	1	1.20	WASHER				SPARE	0.96	1	20	54	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	55	20	1	0.50	GARBAGE DISPOSAL	0.50			LALU ROOM COUNTER RECEPT	0.30	1	20	56	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	57	20	1	0.96	SPARE			1.32	OFFICE RECEPTACLES	0.54	1	20	58	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	59	20	1	1.00	EXTERIOR SIGNAGE				SWRP-1	0.38	1	15	60	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	61	15	1	0.08	EF-2 1ST FLOOR RESTROOM	0.46			HWRP-2	0.38	1	15	62	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	63	15	1	0.2	EF-3 OFFICE RESTROOM		0.60		SPARE	0.00	1	15	64	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	65	15	1	0.13	EF-4 VEHICLE STORAGE RM			0.83	IRRIGATION CONTROL PANEL	0.50	1	15	66	2#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	67	15	1	0.13	EF-5 ELECTRICAL ROOM	0.44			SPARE	0.31			68	
2#12 & 1#12 GND IN 3/4" C	69	20	1	0.36	MECH & ELECT ROOMS RCPTS		0.67		KEF-1 KITCHEN	0.31	3	15	70	3#12 & 1#12GND IN 3/4" C
	71	20	1		SPARE			0.31	SPARE	0.31			72	
	73	20	1		SPARE			0.96	HOSE DRYER	0.96	3	15	74	3#12 & 1#12GND IN 3/4" C
	75	20	1		SPARE			0.96	SPARE	0.96			76	
	77	20	1		SPARE			0.96	SPARE	0.96			78	
	79	20	1		SPARE			0.96	SPARE	0.96			80	
	81	20	1		SPARE			0.96	HOSE WASHER	0.96	3	15	82	3#12 & 1#12GND IN 3/4" C
	83	20	1		SPARE			0.96	SPARE	0.96			84	
						Total (KVA):	41							
LOAD TYPES:						KVA		AMPS						
LIGHTING:						4.40	1.25	6.8						
LARGEST MOTOR:						0.00	1.25	0.0						
ADDITIONAL MOTORS:						0.00	1	12.5						
RECEPTACLES:						22.26	0.5	18.1						
HVAC:						0.00	0.9	0.0						
ELECTRIC SPACE HEATING:						0.30	1	0.0						
KITCHEN:						0.00	0.9	0.0						
MISCELLANEOUS:						0.50	0.8	0.3						

NOTES:
* INDICATES CLASS A, 5ma GFCI BREAKER (PERSONNEL PROTECTION).
** INDICATES 30ma GFCI BREAKER (GPE, EQUIPMENT PROTECTION).
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE RATED MID.
ALL CIRCUIT BREAKERS FOR LIGHTING SHALL BE RATED SWD.
1. E.C. SHALL PROVIDE AN UPDATED PANEL SCHEDULE.
2. RED HANDED CIRCUIT BREAKERS SHALL BE USED FOR ALL FIRE ALARM CIRCUITS.

LOCATION: GROUND FLOOR MAIN ELECTRICAL ROOM
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
PANELBOARD FEEDER: SEE SINGLE LINE DIAGRAM
FEED FROM: MDP - THROUGH TRANSFER SWITCH

PANEL C

SERVICE: 208/120V, 3ø, 4WIRE, 60HZ
AIC (MIN.): 42KAIC
MAINS: 225A MAIN BREAKER
NEUTRAL: YES

WIRE / CABLE DESCRIPTION	CKT NO.	BKR SIZE	POLES	KVA	LOAD DESCRIPTION	A	B	C	LOAD DESCRIPTION	KVA	POLES	BKR SIZE	CKT NO.	WIRE / CABLE DESCRIPTION
2#12 & 1#12 GND IN 3/4" C	1	20	1	0.73	LIGHTING 1ST FLOOR	1.29			LIGHTING 2ND FLOOR	0.55	3	15	2	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	3	20	1	1.16	LIGHTING UTILITY AREA		1.71		LOUVERS L-1, L-2	0.55			4	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	5	15	1	0.30	OUTSIDE BUILDING			0.85	EAC-1	0.55			6	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	7	30	1	1.86	EF-6 ROOF	2.21			EAC-2	0.55	3	15	10	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	9	30	1	1.86	EF-7 ROOF			2.21	EAC-3	0.55	3	15	12	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	11	30	1	1.86	CLEAN ROOM & EXTERIOR RCPTS			2.21	EAC-4	0.55	3	15	14	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	13	30	1	1.86	STORAGE & EXTERIOR RCPTS	2.21			EAC-5	0.55	3	15	16	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	15	30	1	1.86	BAY RECEPTACLES			2.21	EAC-6	0.55	3	15	18	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	17	30	1	1.86	BAY RECEPTACLES			2.21	GUH-1	0.85			20	
2#12 & 1#12 GND IN 3/4" C	19	15	1	0.30	WATCH DESK RECEPTACLES			0.85	GUH-2	0.85			22	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	21	15	1	0.30	WATCH DESK RECEPTACLES			0.85	GUH-3	0.85			24	
2#12 & 1#12 GND IN 3/4" C	23	15	1	0.30	WATCH DESK RECEPTACLES			0.85	GUH-4	0.85			26	
2#12 & 1#12 GND IN 3/4" C	25	15	1	0.30	LOBBY LOUNGE AREA RCPTS	5.30			SPARE	1.68			28	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	27	15	1	0.50	EXERCISE & MECH ROOMS RCPTS	8.50			RTU-1	8.00			30	3#12 & 1#12 GND IN 3/4" C
2#12 & 1#12 GND IN 3/4" C	29	20	1	0.86	EXERCISE ROOM & PATIO RCPTS			6.88	REFRIGERATOR 1	0.00			32	