

COMMERCIAL LOAD SUMMARY					
BUILDING AREA:	7,425 SQ. FT.	VOLTAGE:	208Y/120V, 3PH, 4W		
LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAND FACTOR		DEMAND LOAD (VA)	
LIGHTING					
INTERIOR LIGHTING	6,098	x	125	=	7,623
EXTERIOR LIGHTING	694	x	125	=	868
SIGNAGE	3,600	x	125	=	4,500
MINIMUM GENERAL LIGHTING PER NEC-220 x 125					20,969
MINIMUM TRACK LIGHTING/SHOW WINDOW PER NEC-220 x 125					0
POWER HVAC					
EXISTING	0	x	100	=	0
RECEPTACLES	12,180	x	100	=	11,900
MISCELLANEOUS EQUIPMENT	63,350	x	100	=	63,350
REFRIGERATION EQUIPMENT	0	x	100	=	0
KITCHEN	0	x	100	=	0
HVAC - SUMMER	9,000	x	100	=	9,000
HVAC - WINTER	0	x	100	=	0
SUPP. ELECTRIC HEAT	456	x	100	=	456
MOTORS	11,872	x	100	=	11,872
LARGEST MOTOR	1,300	x	25	=	325
SUB-TOTAL (VA)	108,300				122,429
SUB-TOTAL (AMPS)	301				340
SERVICE SIZE (AMPS)					400
SPARE CAPACITY (AMPS)					60

PANELBOARD MDP													
BUS AMPS: 400				LOCATION: UTILITY AREA				GROUND BUS: YES					
MAIN SIZE / TYPE: MLO				NEMA RATING: NEMA 1				ISOL. GROUND BUS: YES					
VOLTS/PHASE: 208Y/120V, 3PH, 4W				AFC VALUE: 18,874				FEED THRU LUGS: NO					
MOUNTING: SURFACE				AIC RATING: 42,000 A FULLY RATED				SECTIONS: 1 OF 1					
OKT #	CIRCUIT DESCRIPTION	BREAKER	WIRE SIZE	LOAD (VA)	CONNECTED PER PHASE (VA)			LOAD (VA)	WIRE SIZE	BREAKER	CIRCUIT DESCRIPTION	OKT #	
1	RTU-1 (HACR BREAKER)	60	3 RD	4,188	5,688	5,688	5,688	1,500	12	20	EUH-1	2	
3	5HP AIR COMPRESSOR (HACR BREAKER)	30	3 RD	2,100	4,200	4,200	4,200	2,100	RD	3	30	3HP AIR COMPRESSOR (HACR BREAKER)	4
5	EXHAUST FAN EF-3 (HACR BREAKER)	20	3 RD	936	25,636	24,604	24,604	23,668	RD	3	300	PANELBOARD PP	6
7	PANELBOARD LP	100	3 RD	936	4,084	3,875	3,875	0				SPACE ONLY	8
PER PHASE SUB-TOTALS					39,608	38,367	32,899						
TOTAL CONNECTED PANELBOARD (VA)					110,874								
TOTAL CONNECTED PANELBOARD (AMPS)					308								
TOTAL PANELBOARD DEMAND (VA)					105,562								
TOTAL PANELBOARD DEMAND (AMPS)					304								

PANELBOARD PP													
BUS AMPS: 400A				LOCATION: UTILITY AREA				GROUND BUS: YES					
MAIN SIZE / TYPE: MLO				NEMA RATING: NEMA 1				ISOL. GROUND BUS: YES					
VOLTS/PHASE: 208Y/120V, 3PH, 4W				AFC VALUE: 17,499 A				FEED THRU LUGS: YES					
MOUNTING: SURFACE				AIC RATING: 22,000 A FULLY RATED				SECTIONS: 1 OF 2					
OKT #	CIRCUIT DESCRIPTION	BREAKER	WIRE SIZE	LOAD (VA)	CONNECTED PER PHASE (VA)			LOAD (VA)	WIRE SIZE	BREAKER	CIRCUIT DESCRIPTION	OKT #	
1	MVS SERVER CABINET IG IN OFFICE	20	1 12	360	1,260	900	900	900	12	1	20	OFFICE AND CUSTOMER SHOWRM	2
3	OFFICE IG RCPTS	20	1 12	720	1,260	1,800	1,800	1,800	12	1	20	COFFEE BAR	4
5	SALES POD AND/OR DESK IG RCPT	20	1 12	360	1,260	900	900	900	12	1	20	SHOWROOM BACK DESK	6
7	SALES POD AND/OR DESK IG RCPT	20	1 12	360	1,260	900	900	900	12	1	20	TOILET RCPT EWC	8
9	SALES POD AND/OR DESK IG RCPT	20	1 12	360	1,260	900	900	900	12	1	20	BREAKLCKRY ROOF RCPT	10
11	CUSTOMER SHOWRM IG RCPT	20	1 12	180	1,260	1,380	1,380	1,380	12	1	20	MICROWAVE	12
13	SERVICE AREA RCPT	20	1 12	180	1,780	1,780	1,780	1,600	12	2	20	ELECTRONIC WHEEL BALANCER #13A	14
15	SERVICE AREA RCPT	20	1 12	180	1,600	1,600	1,600	1,600	12	1	20	BALANCER NON-ROAD FORCE #13B	16
17	SERVICE AREA RCPT	20	1 12	180	1,100	1,100	1,100	1,100	12	2	20	LOUVER L-2	18
19	ALIGNMENT COMPUTER	20	1 12	1,200	2,300	920	920	2,000	12	1	20	LOUVER L-2	20
21	MVS SERVICE DESK IG IN BAY AREA	20	1 12	720	2,000	800	800	0	12	1	20	SPARE	22
23	SERVICE AREA EWC	20	1 12	800	720	720	720	360	12	1	20	SERVICE AREA RCPT	24
25	SERVICE AREA WORK BENCH	20	1 12	360	2,440	540	540	1,200	12	1	20	SPARE	26
27	BRAKE SHIP #10	20	1 12	1,500	0	0	0	0	12	1	20	SPARE	28
29	SPARE	20	1 12	0	4,260	2,760	2,760	8	2	30	RM CLAMP WHEEL CHANGER #18B	30	
31	HEAVY DUTY CORD DROP #17	20	1 12	1,500	4,260	4,260	4,260	1,840	12	1	20	SERVICE AREA RCPT	32
33	HEAVY DUTY CORD DROP #17	20	1 12	1,500	1,840	540	540	0	12	1	20	SPARE	34
35	SHOP FAN #42	20	1 12	1,300	1,300	0	0	0	12	1	20	SPARE	36
37	SHOP FAN #42	20	1 12	1,300	1,300	0	0	0	12	1	20	SPARE	38
39	SHOP FAN #42	20	1 12	1,300	1,300	0	0	0	12	1	20	SPARE	40
41	SHOP FAN #42	20	1 12	1,300	1,800	500	500	0	12	1	20	HUB STATION	42
PER PHASE SUB-TOTALS					24,700	23,668	20,282						
TOTAL CONNECTED PANELBOARD (VA)					68,650								
TOTAL CONNECTED PANELBOARD (AMPS)					191								
TOTAL PANELBOARD DEMAND (VA)					67,740								
TOTAL PANELBOARD DEMAND (AMPS)					188								

PANELBOARD LP												
BUS AMPS: 125A				LOCATION: UTILITY AREA				GROUND BUS: YES				
MAIN SIZE / TYPE: MLO				NEMA RATING: NEMA 1				ISOL. GROUND BUS: NO				
VOLTS/PHASE: 208Y/120V, 3PH, 4W				AFC VALUE: 16,217 A				FEED THRU LUGS: NO				
MOUNTING: SURFACE				AIC RATING: 22,000 A FULLY RATED				SECTIONS: 1 OF 1				
OKT #	CIRCUIT DESCRIPTION	BREAKER	WIRE SIZE	LOAD (VA)	CONNECTED PER PHASE (VA)			LOAD (VA)	WIRE SIZE	BREAKER	CIRCUIT DESCRIPTION	OKT #
1	SERVICE AREA LIGHTING	20	1 12	1,120	1,320	200	200	12	1	20	TIME CLOCK "TC" CONTACTORS	2
3	SERVICE AREA LIGHTING	20	1 12	1,120	1,300	180	180	12	1	20	EXTERIOR FRONT RCPT	4
5	SERVICE AREA LIGHTING	20	1 12	1,120	1,120	0	0	1	20	SPARE	6	
7	INVENTORY LIGHTING/EF-1L-1	20	1 12	1,212	1,212	0	0	1	20	SPARE	8	
9	EXTERIOR LIGHTING	20	1 12	175	1,375	1,200	1,200	10	1	20	EXTERIOR SIGNAGE	10
11	EXTERIOR LIGHTING	20	1 12	175	450	625	625	12	1	20	SHOWRM LIGHTS	12
13	SERVICE AREA LIGHTING EMLTG	20	1 12	362	362	0	0	1	20	SPARE	14	
15	SHOWRM SIGNAGE	20	1 12	1,200	1,200	0	0	1	20	SPARE	16	
17	SHOWRM LIGHTS,EF	20	1 12	584	584	0	0	1	20	SPARE	18	
19	SPARE	20	1 12	0	0	0	0	1	20	SPARE	20	
21	SPARE	20	1 12	0	0	0	0	1	20	SPARE	22	
23	SUPPORT AREA LTG/EM LTG/EF-2	20	1 12	440	784	344	344	10	1	20	SITE LIGHTING (FUTURE)	24
25	SPARE	20	1 12	0	1,200	0	0	8	1	20	MONUMENT SIGNAGE	26
27	SPARE	20	1 12	0	180	180	180	10	1	20	SPARE	28
29	SPARE	20	1 12	0	180	180	180	10	1	20	MONUMENT SIGN RCPT	30
PER PHASE SUB-TOTALS					4,084	3,875	3,293					
TOTAL CONNECTED PANELBOARD (VA)					11,252							
TOTAL CONNECTED PANELBOARD (AMPS)					31							
TOTAL PANELBOARD DEMAND (VA)					13,850							
TOTAL PANELBOARD DEMAND (AMPS)					38							

SECTION 2												
BUS AMPS: 20				LOCATION: UTILITY AREA				GROUND BUS: YES				
MAIN SIZE / TYPE: MLO				NEMA RATING: NEMA 1				ISOL. GROUND BUS: NO				
VOLTS/PHASE: 208Y/120V, 3PH, 4W				AFC VALUE: 16,217 A				FEED THRU LUGS: NO				
MOUNTING: SURFACE				AIC RATING: 22,000 A FULLY RATED				SECTIONS: 1 OF 1				
OKT #	CIRCUIT DESCRIPTION	BREAKER	WIRE SIZE	LOAD (VA)	CONNECTED PER PHASE (VA)			LOAD (VA)	WIRE SIZE	BREAKER	CIRCUIT DESCRIPTION	OKT #
43	LIT EQUIPMENT	20	1 12	500	2,100	1,600	1,600	10	1	20	SMART LIFT BAY #1	44
45	SPARE	20	1 12	0	1,600	1,500	1,500	10	1	20	SMART LIFT BAY #2	46
47	SHOW WINDOW RCPT	20	1 12	360	1,960	1,600	1,600	10	1	20	SMART LIFT BAY #2	48
49	SPARE	20	1 12	0	1,600	1,600	1,600	10	1	20	SMART LIFT BAY #3	50
51	OVERHEAD DROP CORD LIGHT #2	20	1 12	200	1,800	1,600	1,600	10	2	20	SMART LIFT BAY #3	52
53	OVERHEAD DROP CORD LIGHT #2	20	1 12	200	1,800	1,600	1,600	10	2	20	SMART LIFT BAY #4	54
55	OVERHEAD DROP CORD LIGHT #2	20	1 12	200	1,800	1,600	1,600	10	2	20	SMART LIFT BAY #4	56
57	OVERHEAD DROP CORD LIGHT #2	20	1 12	200	1,800	1,600	1,600	10	2	20	SMART LIFT BAY #5	58
59	OVERHEAD DROP CORD LIGHT #2	20	1 12	190	1,700	1,600	1,600	10	2	20	SMART LIFT BAY #5	60
61	SPARE	20	1 12	0	1,600	1,600	1,600	10	2	20	SMART LIFT BAY #6	62
63	UTILITY AREA RCPT	20	1 12	180	2,880	2,700	2,700	10	2	30	ALIGNMENT LIFT BAY #6	64
65	WATER HEATER WH-1	20	1 12	180	1,600	2,900	2,900	10	2	30	ALIGNMENT LIFT BAY #6	66
67	SPARE	20	1 12	0	1,600	1,600	1,600	10	2	20	SMART LIFT BAY #7	68
69	FIRE SERVICE PANELS	20	1 12	0	1,960	1,600	1,600	10	2	20	SMART LIFT BAY #7	70
71	INVENTORY RCPT	20	1 12	0	1,960	1,600	1,600	10	2	20	SMART LIFT BAY #8	72
73	AIR DRYER #9	20	1 12	1,200	2,800	1,600	1,600	10	2	20	SMART LIFT BAY #8	74
75	UNIT HEATER UH-1	15	1 12	228	228	0	0	12	1	20	SPARE	76
77	UNIT HEATER UH-2	15	1 12	228	852	624	624	12	1	20	GAS FIRED RADIANT HEATERS	78
79	OPTIONAL SECURITY SYSTEM	20	1 12	360	360	0	0	1	20	SPARE	80	
81	UTILITY AREA RCPT	20	1 12	360	540	190	190	12	1	20	RECIRCULATION PUMP	82
83	CO SENS.	20	1 12	200	1,200	1,000	1,000	12	1	20	REFRIGERATOR	84
PER PHASE SUB-TOTALS					24,700	23,668	20,282					
TOTAL CONNECTED PANELBOARD (VA)					68,650							
TOTAL CONNECTED PANELBOARD (AMPS)					191							
TOTAL PANELBOARD DEMAND (VA)					67,740							
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