

**MECHANICAL 505**

**PANEL: LA4C** VOLTAGE: 208 / 120 3Ø 4W CIRCUIT CODE: L - LIGHTING H - ELECTRIC HEATING  
 BUS: 225A R - RECEPTACLES W - ELECT. WATER HTR  
 DATE: 4/1/10 5:17 PM MAINS: L.O. MOUNTING: SURFACE NEMA 1 ENCLOSURE FULLY RATED AIC: 10,000  
 JOB: 09.0394

CIRCUIT CODE	TRIP	POLE	LOAD DESIGNATION	C O N N E C T E D V A			LOAD DESIGNATION	TRIP	POLE	CIRCUIT CODE	TRIP
				ØA	ØB	ØC					
1 R	20	1	REC - MECH ROOM	720		500	B-1	20	1	R	2
3 R	20	1	REC - MECH ROOM	720		500	---	20	1	R	4
5 R	20	1	REC - ROOF	360		500	B-1	20	1	R	6
7 R	20	1	REC - ROOF	360		500	---	20	1	R	8
9 O	20	1	EF-4	864		500	---	20	1	O	10
11 L	20	1	LTS - MECHANICAL ROOM	1408		500	B-2	20	1	L	12
13 L	20	1	LTS - FOLLOW SPOT ROOM	570		500	B-3	20	1	L	14
15	20	1	SPARE			500	---	20	1	O	16
17	20	1	SPARE			500	B-3	20	1	O	18
19	20	1	SPARE			1200	VEF-7	20	1	O	20
21	20	1	SPARE			200	WH-1	20	1	O	22
23	20	1	SPARE			200	WH-2	20	1	O	24
25	20	1	SPARE				---	20	1	O	26
27	L	3Ø	FOLLOW SPOT	1000			SPARE	20	1	L	28
29	L	3Ø	FOLLOW SPOT	1000			SPARE	20	1	L	30
31	L	3Ø	FOLLOW SPOT	1000			SPARE	20	1	L	32
33	L	2	---	1000			SPARE	20	1	L	34
35	L	3Ø	FOLLOW SPOT	1000			SPARE	20	1	L	36
37	L	3Ø	FOLLOW SPOT	1000			SPARE	20	1	L	38
39	L	3Ø	FOLLOW SPOT	1000			SPARE	20	1	L	40
41	L	2	---	1000			SPARE	20	1	L	42

PANEL NOTES: PHASE TOTALS PH A: 6350 PH B: 6284 PH C: 6468 TOTAL CONNECTED VA 19102  
 PANEL CONNECTED KVA 19.1  
 PANEL DEMAND KVA 21.6  
 PANEL DEMAND AMPS 59.9

**CALCULATION BY LOAD TYPE:**

LIGHTING	9,978	VOLTAMPS x 1.25 =	12,473	VOLTAMPS
RECEPTACLES - 1ST 10KVA	2,160	VOLTAMPS x 1.00 =	2,160	VOLTAMPS
RECEPTACLES - BALANCE	0	VOLTAMPS x 0.50 =	0	VOLTAMPS
LARGEST MOTOR LOAD	0	VOLTAMPS x 1.25 =	0	VOLTAMPS
BALANCE OF MOTOR LOADS	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
KITCHEN EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC HEATING EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC WATER HEATER	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
AIR CONDITIONING	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
MISC LOADS	6,964	VOLTAMPS x 1.00 =	6,964	VOLTAMPS
<b>TOTAL CALCULATED DEMAND LOAD</b>	<b>21,597</b>	<b>VOLTAMPS</b>		
			<b>59.9</b>	<b>FULL LOAD AMPS</b>

**STAGE LEFT**

**PANEL: LB1A** VOLTAGE: 208 / 120 3Ø 4W CIRCUIT CODE: L - LIGHTING H - ELECTRIC HEATING  
 BUS: 225A R - RECEPTACLES W - ELECT. WATER HTR  
 DATE: 4/1/10 5:18 PM MAINS: L.O. MOUNTING: SURFACE NEMA 1 ENCLOSURE FULLY RATED AIC: 10,000  
 JOB: 09.0394

CIRCUIT CODE	TRIP	POLE	LOAD DESIGNATION	C O N N E C T E D V A			LOAD DESIGNATION	TRIP	POLE	CIRCUIT CODE	TRIP
				ØA	ØB	ØC					
1 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	2
3 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	4
5 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	6
7 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	8
9 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	10
11 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	12
13 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	14
15 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	16
17 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	18
19 R	20	1	REC-DRESSING RMS	1260		1260	REC-DRESSING RMS	20	1	R	20
21	20	1	SPARE			1260	REC-DRESSING RMS	20	1	R	22
23	20	1	SPARE			1260	REC-DRESSING RMS	20	1	R	24
25	20	1	SPARE			1260	REC-DRESSING RMS	20	1	R	26
27	L	20	LTS-DRESSING RMS	1275		1260	REC-DRESSING RMS	20	1	R	28
29	L	20	LTS-DRESSING RMS	1275		1260	REC-DRESSING RMS	20	1	R	30
31	L	20	LTS-DRESSING RMS	1275		1275	LTS-DRESSING	20	1	L	32
33	L	20	LTS-DRESSING RMS	1275		1275	LTS-DRESSING	20	1	L	34
35	20	1	SPARE			1275	LTS-DRESSING	20	1	L	36
37	20	1	SPARE			1275	LTS-DRESSING	20	1	L	38
39	20	1	SPARE			1275	LTS-DRESSING	20	1	L	40
41	20	1	SPARE			1275	LTS-DRESSING	20	1	L	42

PANEL NOTES: PHASE TOTALS PH A: 15165 PH B: 15180 PH C: 13905 TOTAL CONNECTED VA 44250  
 PANEL CONNECTED KVA 44.3  
 PANEL DEMAND KVA 36.7  
 PANEL DEMAND AMPS 101.8

**CALCULATION BY LOAD TYPE:**

LIGHTING	12,750	VOLTAMPS x 1.25 =	15,938	VOLTAMPS
RECEPTACLES - 1ST 10KVA	10,000	VOLTAMPS x 1.00 =	10,000	VOLTAMPS
RECEPTACLES - BALANCE	21,500	VOLTAMPS x 0.50 =	10,750	VOLTAMPS
LARGEST MOTOR LOAD	0	VOLTAMPS x 1.25 =	0	VOLTAMPS
BALANCE OF MOTOR LOADS	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
KITCHEN EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC HEATING EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC WATER HEATER	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
AIR CONDITIONING	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
MISC LOADS	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
<b>TOTAL CALCULATED DEMAND LOAD</b>	<b>36,688</b>	<b>VOLTAMPS</b>		
			<b>101.8</b>	<b>FULL LOAD AMPS</b>

**STAGE LEFT**

**PANEL: LB1AS** VOLTAGE: 208 / 120 3Ø 4W CIRCUIT CODE: L - LIGHTING H - ELECTRIC HEATING  
 BUS: 225A R - RECEPTACLES W - ELECT. WATER HTR  
 DATE: 4/1/10 5:19 PM MAINS: L.O. MOUNTING: SURFACE NEMA 1 ENCLOSURE FULLY RATED AIC: 10,000  
 JOB: 09.0394

CIRCUIT CODE	TRIP	POLE	LOAD DESIGNATION	C O N N E C T E D V A			LOAD DESIGNATION	TRIP	POLE	CIRCUIT CODE	TRIP
				ØA	ØB	ØC					
1 R	20	1	REC-LTS-DRESSING	600		828	LTS-DRESSING RMS	20	1	L	2
3 R	20	1	REC-LTS-DRESSING	780		964	LTS-DRESSING RMS	20	1	L	4
5 R	20	1	REC-COMP. MOR	720		106	LTS-BASEMENT	20	1	L	6
7 R	20	1	REC-CORRIDOR	540		728	LTS-BASEMENT	20	1	L	8
9 R	20	1	REC-STAGE	540			SPARE	20	1	O	10
11 R	20	1	REC-STAGE	360			SPARE	20	1	O	12
13 O	20	1	FC-19	700			SPARE	20	1	O	14
15 O	20	1	FC-1, FC-2	1400			SPARE	20	1	O	16
17 O	20	1	FC-5, FC-9	1050			SPARE	20	1	O	18
19 O	20	1	FC-3, FC-10	1400			SPARE	20	1	O	20
21 O	20	1	FC-4, FC-11	1400			SPARE	20	1	O	22
23 N	20	1	REC - EWC	596			SPARE	20	1	O	24
25	20	1	SPARE				SPARE	20	1	O	26
27	20	1	SPARE				SPARE	20	1	O	28
29	20	1	SPARE				SPARE	20	1	O	30
31	20	1	SPARE				SPARE	20	1	O	32
33	20	1	SPARE				SPARE	20	1	O	34
35	20	1	SPARE				SPARE	20	1	O	36
37 O	60	3	DIS-SP2	2000			SPARE	20	1	O	38
39 O	3	---	---	2000			SPARE	20	1	O	40
41 O	3	---	---	2000			SPARE	20	1	O	42

PANEL NOTES: PHASE TOTALS PH A: 6796 PH B: 7084 PH C: 4832 TOTAL CONNECTED VA 18712  
 PANEL CONNECTED KVA 18.7  
 PANEL DEMAND KVA 18.8  
 PANEL DEMAND AMPS 52.1

**CALCULATION BY LOAD TYPE:**

LIGHTING	2,626	VOLTAMPS x 1.25 =	3,283	VOLTAMPS
RECEPTACLES - 1ST 10KVA	3,540	VOLTAMPS x 1.00 =	3,540	VOLTAMPS
RECEPTACLES - BALANCE	0	VOLTAMPS x 0.50 =	0	VOLTAMPS
LARGEST MOTOR LOAD	0	VOLTAMPS x 1.25 =	0	VOLTAMPS
BALANCE OF MOTOR LOADS	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
KITCHEN EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC HEATING EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC WATER HEATER	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
AIR CONDITIONING	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
MISC LOADS	11,950	VOLTAMPS x 1.00 =	11,950	VOLTAMPS
<b>TOTAL CALCULATED DEMAND LOAD</b>	<b>18,773</b>	<b>VOLTAMPS</b>		
			<b>52.1</b>	<b>FULL LOAD AMPS</b>

**STAGE RIGHT**

**PANEL: LB1B** VOLTAGE: 208 / 120 3Ø 4W CIRCUIT CODE: L - LIGHTING H - ELECTRIC HEATING  
 BUS: 225A R - RECEPTACLES W - ELECT. WATER HTR  
 DATE: 4/1/10 5:20 PM MAINS: L.O. MOUNTING: SURFACE NEMA 1 ENCLOSURE FULLY RATED AIC: 10,000  
 JOB: 09.0394

CIRCUIT CODE	TRIP	POLE	LOAD DESIGNATION	C O N N E C T E D V A			LOAD DESIGNATION	TRIP	POLE	CIRCUIT CODE	TRIP
				ØA	ØB	ØC					
1 R	20	1	REC-STAGE MOR	720		1500	REC-WASHER	20	1	O	2
3 R	20	1	REC-WARDROBE	180		1500	REC-WASHER	20	1	O	4
5 R	20	1	REC-ORCH. PIT	360		1500	REC-WASHER	20	1	O	6
7 R	20	1	REC-ORCH. PIT	360		2500	REC-DRYER	30	1	H	8
9 R	20	1	REC-MULTIPURPOSE	540		2500	---	2	H	10	
11 O	20	1	REC-MULTIPURPOSE	540		2500	REC-DRYER	30	H	12	
13 O	20	1	REC-DISHWASHER	1200			---	2	H	14	
15 O	20	1	REC-KIT. APPL.	180			SPARE	20	1	O	16
17 O	20	1	REC-REFRIG.	600		768	LTS-BASEMENT	20	1	L	18
19 O	20	1	REC-KIT. APPL.	180		350	FC-20	20	1	M	20
21 O	20	1	REC-KIT. APPL.	180		1400	FC-12, FC-13	20	1	M	22
23 O	20	1	REC-CORRIDOR	540		1050	FC-6, FC-14	20	1	M	24
25	20	1	SPARE			1400	FC-7, FC-8	20	1	M	26
27 R	20	1	REC-CORRIDOR	540		180	REC-WARDROBE	20	1	R	28
29 R	20	1	REC-STAGE	540		180	REC-WARDROBE	20	1	R	30
31 R	20	1	REC-REFRIG.	600		180	REC-WARDROBE	20	1	R	32
33 O	20	1	ELEV SUMP	1176		180	REC-WARDROBE	20	1	R	34
35 O	60	3	ELEV LITS/REC	280		180	REC-WARDROBE	20	1	R	36
37 O	60	3	DIS-SP1	2000		596	REC - EWC	20	1	O	38
39 O	3	---	---	2000			SPARE	20	1	O	40
41 O	3	---	---	2000		500	FSD	20	1	O	42

PANEL NOTES: PHASE TOTALS PH A: 14626 PH B: 10556 PH C: 11538 TOTAL CONNECTED VA 36720  
 PANEL CONNECTED KVA 36.7  
 PANEL DEMAND KVA 36.3  
 PANEL DEMAND AMPS 100.8

**CALCULATION BY LOAD TYPE:**

LIGHTING	768	VOLTAMPS x 1.25 =	960	VOLTAMPS
RECEPTACLES - 1ST 10KVA	5,820	VOLTAMPS x 1.00 =	5,820	VOLTAMPS
RECEPTACLES - BALANCE	0	VOLTAMPS x 0.50 =	0	VOLTAMPS
LARGEST MOTOR LOAD	0	VOLTAMPS x 1.25 =	0	VOLTAMPS
BALANCE OF MOTOR LOADS	4,200	VOLTAMPS x 1.00 =	4,200	VOLTAMPS
KITCHEN EQUIPMENT	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
ELECTRIC HEATING EQUIPMENT	10,000	VOLTAMPS x 1.00 =	10,000	VOLTAMPS
ELECTRIC WATER HEATER	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
AIR CONDITIONING	0	VOLTAMPS x 1.00 =	0	VOLTAMPS
MISC LOADS	15,336	VOLTAMPS x 1.00 =	15,336	VOLTAMPS
<b>TOTAL CALCULATED DEMAND LOAD</b>	<b>36,316</b>	<b>VOLTAMPS</b>		
			<b>100.8</b>	<b>FULL LOAD AMPS</b>

**LEVEL 3 STAGE LEFT**

**PANEL: LB3A** VOLTAGE: 208 / 120 3Ø 4W CIRCUIT CODE: L - LIGHTING H - ELECTRIC HEATING  
 BUS: 225A R - RECEPTACLES W - ELECT. WATER HTR  
 DATE: 4/1/10 5:21 PM MAINS: L.O. MOUNTING: SURFACE NEMA 1 ENCLOSURE FULLY RATED AIC: 10,000  
 JOB: 09.0394

CIRCUIT CODE	TRIP	POLE	LOAD DESIGNATION	C O N N E C T E D V A			LOAD DESIGNATION	TRIP	POLE	CIRCUIT CODE	TRIP
				ØA	ØB	ØC					
1 R	20	1	REC-DRESSING RM 328	1260		900	LTS-DRESSING RM 328	20	1	L	2
3 R	20	1	REC-DRESSING RM 328	1260		900	LTS-DRESSING RM 328	20	1	L	4
5 R	20	1	REC-DRESSING RM 328	1260		900	LTS-DRESSING RM 236	20	1	L	6
7 R	20	1	REC-DRESSING RM 328	12							