

208Y120V 3Ph 4W Full size neutral, w/copper ground bus

### PANEL "L4M"

Copper Bus Rating: 225 AMP  
Mains Rating (M.C.B.): 225 AMP  
1 run of 4#40, 1 #4 G, 3 1/2" C.  
Feeder Ampacity = 230A

LOAD DESCRIPTION	TYPE	LOAD KVA	LOAD AMP	WIRE/CONDUIT SIZE (Note 1)	TRIPPOLE (Note 2)	CKT # (Note 3)	PH # (Note 3)	WIRE/CONDUIT SIZE (Note 1)	LOAD AMP	LOAD KVA	TYPE	LOAD DESCRIPTION
CU-12	C	2.4	23.5	2#6, 1#10G, 3/4" (Note 3)	40	12	1	20 #12, 1#12G, 1/2"	10.0	1.20	MIS	AQUARIUM
*23.5 FLA-Disc3A2P240VNFANR	C	2.4	23.5		3	9	4	20 #12, 1#12G, 1/2"	10.0	1.20	MIS	WASHER
CU-15	C	2.4	23.5	2#6, 1#10G, 3/4" (Note 3)	40	12	5	20 #12, 1#12G, 1/2"	20.0	2.1	MIS	DRYER
*23.5 FLA-Disc3A2P240VNFANR	C	2.4	23.5		7	8		20.0	2.1	MIS	**30A-125/250V-3P-4W-G-NEMA 14-30R	
CU-14	C	2.7	26.2	2#6, 1#10G, 3/4" (Note 3)	40	12	9	20 #12, 1#12G, 1/2"	10.0	1.20	MT	FOUNTAIN
*26.2 FLA-Disc3A2P240VNFANR	C	2.7	26.2		11	12	20	20 #12, 1#12G, 1/2"	10.0	1.20	MT	FOUNTAIN
CU-15	C	1.7	16.8	2#10, 1#10G, 1/2" (Note 3)	25	12	13	20 #12, 1#12G, 1/2"	4.5	0.53	MT	EXHAUST FANS EF-16, 17, 18, 19, 20, 21
*16.8 FLA-Disc3A2P240VNFANR	C	1.7	16.8		15	16	20	20 #12, 1#12G, 1/2"	3.0	0.36	R	EXTERIOR RECS (2)
SPACE					17	17	18	20 #12, 1#12G, 1/2"	3.0	0.36	R	EQPT RECS (2)
SPACE					19	19	20	20 #12, 1#12G, 1/2"	4.2	0.50	MT	BAS
FCU-12,3AMP Disc3A2P240VNI	MT	1.7	13.8	2#12, 1#12G, 3/4"	20	11	21	20 #12, 1#12G, 1/2"	2.1	0.25	MT	DAMPER
FCU-13,3AMP Disc3A2P240VNI	MT	1.7	13.8	2#12, 1#12G, 3/4"	20	11	23	20 #12, 1#12G, 1/2"	3.6	0.43	L	MECH. LIGHTING
FCU-14,3AMP Disc3A2P240VNI	MT	1.7	13.8	2#12, 1#12G, 3/4"	20	11	25	20 #12, 1#12G, 1/2"	2.1	0.25	MT	RECIRC PUMP RCP-1
FCU-15,3AMP Disc3A2P240VNI	MT	1.7	13.8	2#12, 1#12G, 3/4"	20	11	27	20 #12, 1#12G, 1/2"	2.1	0.25	MIS	FIRE ALARM PANEL
SPACE					29	29	30	20 #12, 1#12G, 1/2"				SPACE
SPACE					31	31	32					SPACE
SPACE					33	33	34					SPACE
SPACE					35	35	36					SPACE
SPACE					37	37	38	60 #3 4#6, 1#10G, 1 1/4"	0.0	0.0	MIS	SPD (Externally Mounted Surge-Protective Device)
SPACE					39	39	40		0.0	0.0	MIS	***
SPACE					41	41	42		0.0	0.0	MIS	***

PANEL "L4M" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	CONNECTED	CALCULATED	NEC CALCULATION REFERENCE
LIGHTING	L	1.25	0.4	0.5	125% of connected loads
RECEPTACLES	R	1	0.7	0.7	
COOLING LOADS	C	1	18.7	18.7	Cooling loads larger than heating
HEATING LOADS (non-coincident w/cooling)	H				
MOTOR	MT	1	10.6	10.6	
MISC. NON-CONTINUOUS LOADS	MIS	1	6.8	6.8	
2% LARGEST MOTOR (1.7 KVA)		0.25		0.4	
TOTAL LOAD (KVA)			37.2 KVA	37.8 KVA	
TOTAL LOAD (AMP AVG)			103.4 AMP	104.8 AMP	Conf Amps: PHA-118A, PHB-122A, PHC-132A, NEUH-23A

208Y120V 3Ph 4W Full size neutral, w/copper ground bus

### PANEL "L4A"

Copper Bus Rating: 225 AMP  
Mains Rating (M.C.B.): 225 AMP  
1 run of 4#40, 1 #4 G, 3 1/2" C.  
Feeder Ampacity = 230A

LOAD DESCRIPTION	TYPE	LOAD KVA	LOAD AMP	WIRE/CONDUIT SIZE (Note 1)	TRIPPOLE (Note 2)	CKT # (Note 3)	PH # (Note 3)	WIRE/CONDUIT SIZE (Note 1)	LOAD AMP	LOAD KVA	TYPE	LOAD DESCRIPTION
EXTERIOR REC (2)	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	1	20 #12, 1#12G, 1/2"	6.0	0.72	MIS	TV REC (2) 120A
GF RR (2) 122A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	3	20 #12, 1#12G, 1/2"	3.0	0.36	MIS	TV REC (1) 127A
BEDROOM REC (2) 123A	R	0.72	6.0	2#12, 1#12G, 1/2"	20	11	5	20 #12, 1#12G, 1/2"	6.0	0.72	MIS	TV REC (2) 116A
GF & (3) REC 123A	R	0.72	6.0	2#12, 1#12G, 1/2"	20	11	7	20 #12, 1#12G, 1/2"	6.0	0.72	MIS	TV REC (2) 128A
BEDROOM REC (2) 127A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	9	20 #12, 1#12G, 1/2"	6.0	0.72	MIS	GREAT ROOM TV REC (2) 117A
BEDROOM REC (4) 116A	R	0.72	6.0	2#12, 1#12G, 1/2"	20	11	11	20 #12, 1#12G, 1/2"	4.2	0.50	MIS	PCS (2) 117A & 125A
GF RR (2) 115A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	13	20 #12, 1#12G, 1/2"	7.3	0.88	L	LIGHTING 124A
BEDROOM REC (4) 128A	R	0.72	6.0	2#12, 1#12G, 1/2"	20	11	15	20 #12, 1#12G, 1/2"	10.6	1.28	L	LIGHTING 128A
BEDROOM REC (4) 128A	R	0.72	6.0	2#12, 1#12G, 1/2"	20	11	17	20 #12, 1#12G, 1/2"	0.8	0.10	L	LIGHTING 128A
GREAT ROOM REC (6) 117A	R	1.08	9.0	2#12, 1#12G, 1/2"	20	11	19	20 #12, 1#12G, 1/2"	9.8	1.18	L	LIGHTING 137A
GREAT ROOM REC (2) 117A	R	0.90	7.5	2#12, 1#12G, 1/2"	20	11	21	20 #12, 1#12G, 1/2"	4.4	0.53	L	LIGHTING 177A
GREAT ROOM REC (2) 117A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	23	20 #12, 1#12G, 1/2"	7.5	0.90	M	FANS
GREAT ROOM REC (2) 117A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	25	20 #12, 1#12G, 1/2"				SPACE
CORRIDOR REC (4) 118A	R	0.72	6.0	2#12, 1#12G, 1/2"	20	11	27	20 #12, 1#12G, 1/2"				SPACE
CONVENIENCE REC (2) 125A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	29	20 #12, 1#12G, 1/2"				SPACE
GF & (2) REC 119A	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	31	20 #12, 1#12G, 1/2"				SPACE
EXTERIOR REC (2)	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	33	20 #12, 1#12G, 1/2"				SPACE
EXTERIOR REC (2)	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	35	20 #12, 1#12G, 1/2"				SPACE
EXTERIOR REC (1)	R	0.18	1.5	2#12, 1#12G, 1/2"	20	11	37	20 #12, 1#12G, 1/2"	0.0	0.0	MIS	SPD (Externally Mounted Surge-Protective Device)
SPACE					39	39	40		0.0	0.0	MIS	***
SPACE					41	41	42		0.0	0.0	MIS	***

PANEL "L4A" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	CONNECTED	CALCULATED	NEC CALCULATION REFERENCE
LIGHTING	L	1.25	4.0	4.9	125% of connected loads
RECEPTACLES	R	1	10.1	10.0	NEC2011 Art. 220.44, First 100VA @100%, Remainder @50%
MISC. NON-CONTINUOUS LOADS	MIS	1	3.7	3.7	
TOTAL LOAD (KVA)			17.8 KVA	18.7 KVA	
TOTAL LOAD (AMP AVG)			49.3 AMP	52.0 AMP	Conf Amps: PHA-118A, PHB-122A, PHC-132A, NEUH-23A

208Y120V 3Ph 4W Full size neutral, w/copper ground bus

### PANEL "GAR"

Copper Bus Rating: 100 AMP  
Mains Rating (M.C.B.): 100 AMP  
1 run of 4#60, 1 #6 G, 3 1/2" C.  
Feeder Ampacity = 175A

LOAD DESCRIPTION	TYPE	LOAD KVA	LOAD AMP	WIRE/CONDUIT SIZE (Note 1)	TRIPPOLE (Note 2)	CKT # (Note 3)	PH # (Note 3)	WIRE/CONDUIT SIZE (Note 1)	LOAD AMP	LOAD KVA	TYPE	LOAD DESCRIPTION
LIGHTING	L	0.49	4.1	2#12, 1#12G, 1/2"	20	11	1	20 #12, 1#12G, 1/2"	16.5	1.7	MIS	COMPRESSOR CU-21
RECS	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	3	20 #12, 1#12G, 1/2"	16.5	1.7	MIS	**16.5 FLA-Disc3A2P240VNFANR
RECS	R	0.36	3.0	2#12, 1#12G, 1/2"	20	11	5	20 #12, 1#12G, 1/2"				SPACE
SPACE					7	7	8					SPACE
SPACE					9	9	10					SPACE
SPACE					11	11	12					SPACE

PANEL "GAR" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	CONNECTED	CALCULATED	NEC CALCULATION REFERENCE
LIGHTING	L	1.25	0.5	0.6	125% of connected loads
RECEPTACLES	R	1	0.7	0.7	
TOTAL LOAD (KVA)			4.6 KVA	4.9 KVA	
TOTAL LOAD (AMP AVG)			12.9 AMP	13.2 AMP	Conf Amps: PHA-118A, PHB-122A, PHC-132A, NEUH-23A

208Y120V 3Ph 4W Full size neutral, w/copper ground bus Eqpt Is Service Entrance Rated

### OPTIMUM CARE, HOUSTON TX

#### DIST. PANELBOARD - "DP2"

Copper Bus Rating: 600 Amp  
Mains Rating (MCB w/Ground Fault Protection): 600 Amp  
3 runs of 4#500 KCMIL, 1 #3/0 G, 4" conduit  
Feeder Ampacity = 1140A  
(All wires shall have THHN/THWN insulation unless noted otherwise)

CKT.	LOAD DESCRIPTIONS	Load Type	CONN. KVA	CONN. AMP	Code	OC. Type	BKR	POLES	Phase	PHASE WIRES, NEUTRAL & GND & CONDUIT SIZE	FEEDER AMPACITY
1	SPD (Externally Mounted Surge-Protective Device)	MIS								1 run 4#500 KCMIL, 1 1/2"	100 Amp
2	Dist Pnl "DP2"		77.4	214.7		CB	100	3P	A, B, C	1 run 4#500 KCMIL, 1 1/2"	420 Amp
3	Panel "L4M"		18.7	52.0		CB	225	3P	A, B, C	1 run 4#40, 1 #4 G, 3 1/2"	230 Amp
4	Panel "L4M"		37.8	104.8		CB	225	3P	A, B, C	1 run 4#40, 1 #4 G, 3 1/2"	230 Amp
5	SPACE					Y	CB	225	3P	A, B, C	
6	SPACE					Y	CB	225	3P	A, B, C	
7	SPACE					Y	CB	225	3P	A, B, C	
8	SPACE					Y	CB	225	3P	A, B, C	
9	SPACE					Y	CB	100	3P	A, B, C	
10	SPACE					Y	CB	100	3P	A, B, C	
11	SPACE					Y	CB	100	3P	A, B, C	
12	SPACE					Y	CB	100	3P	A, B, C	

DIST. PANELBOARD - "DP2" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	CONNECTED	CALCULATED	NEC CALCULATION REFERENCE
LIGHTING	L	1.25	8.9	11.2	125% of connected loads
RECEPTACLES	R	1	22.0	16.0	NEC2011 Art. 220.44
COOLING LOADS	C	1	44.6	44.6	Cooling loads larger than heating
HEATING LOADS (non-coincident w/cooling)	H				
MOTOR	MT	1	24.7	24.7	
MISC. NON-CONTINUOUS LOADS	MIS	1	25.1	25.1	
KITCHEN LOADS	K	0.65	9.1	6.9	NEC2011 Art. 220.56
OUTSIDE LIGHTING	OL	1.25	0.5	0.6	
NON-COINCIDENT LOADS	NC				
TOTAL LOAD (KVA)			134.9 KVA	128.1 KVA	
TOTAL LOAD (AMP AVG)			374.4 AMP	355.5 AMP	PHA-416A, PHB-378A, PHC-345A, NEUH-58A

Relay Panel Summary

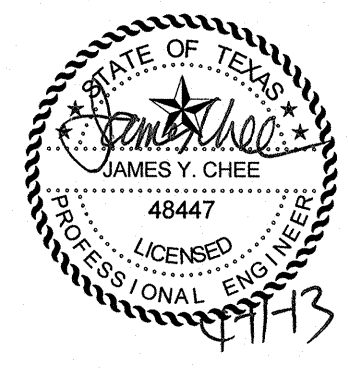
OPTIMUM CARE, HOUSTON TX

Relay Panel	1-Pole Qty	Total Poles	Relay Panel Size	LCD catalog number (or approved equal)
RP3	3	3	8	LCD # GR1408LT / 8 DTC MODEM (8 relays)
RP4	3	3	8	LCD # GR1408LT / 8 DTC MODEM (8 relays)

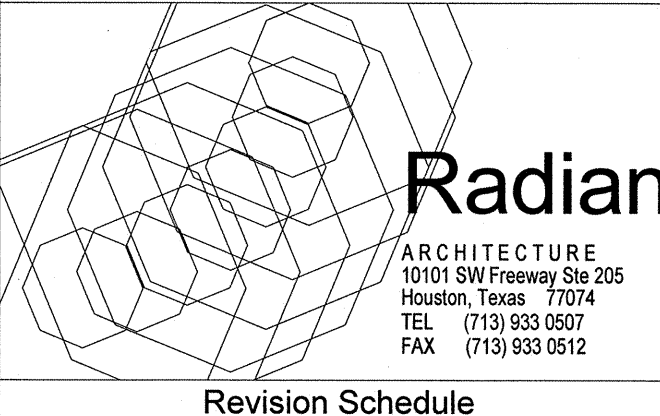
Relay Panel Load Schedule

OPTIMUM CARE, HOUSTON TX

Relay Panel	Relay #	Loads Served (Zone Name)	Area served	Zone	Elec Panel	Circuit Controlled	Time On	Time Off	Flash	Overside	Digital Switch	1-Pole
RP3	1	EXTERIOR LTG	EXT	B31	L3A	39	8:00PM	7:00AM	N	N	N	1
RP3	3	LIGHTING 117B	INT	B31	L3A	22	8:00AM	11:PM	Y	Y	Y	1
RP3	4	FANS	INT	B32	L3A	24	9:00AM	11:PM	N	Y	Y	1
RP4	3	LIGHTING 177A	INT	B41	L4A	22	8:00AM	11:00PM	Y	Y	Y	1
RP4	4	FANS	INT	B42	L4A	24	9:00AM	11:00PM	Y	Y	Y	1



OPTIMUM CARE  
SUGAR LAND, TEXAS



Revision Schedule

#	Date	Description

Project No.  
**ELECTRICAL PANEL SCHEDULES**  
Sheet No.

**E3.06**

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