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SHUNTED PANELBOARD SCHEDULE - 'S3' CARPENTRY

MAIN: 200A MCB | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	B	C	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	20	1	12	3/4"	RECEPT - GENERAL		1.0										0.4						RECEPT - GENERAL	3/4"	12	1	20	2
3	20	1	12	3/4"	RECEPT - EXTERIOR		0.4											0.8						DRILL PRESS	3/4"	12	1	20	4
5	20	1	12	3/4"	RECEPT - EXTERIOR		0.4											1.0						CHOP SAW	3/4"	12	1	20	6
7	20	1	12	3/4"	CORD REEL (GFI BREAKER)			0.5										0.8						BAND SAW	3/4"	12	1	20	8
9	20	1	12	3/4"	CORD REEL (GFI BREAKER)			1.0										0.8						BAND SAW	3/4"	12	1	20	10
11	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											1.2						LARGE LATHE	3/4"	12	1	20	12
13	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											1.2						LARGE LATHE	3/4"	12	1	20	14
15	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.8						SMALL LATHE	3/4"	12	1	20	16
17	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.8						SMALL LATHE	3/4"	12	1	20	18
19	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											1.0						GRINDER	3/4"	12	1	20	20
21	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											1.0						GRINDER	3/4"	12	1	20	22
23	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.7						SCROLL SAW	3/4"	12	1	20	24
25	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.7						SCROLL SAW	3/4"	12	1	20	26
27	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.7						SCROLL SAW	3/4"	12	1	20	28
29	20	1	12	3/4"	AIR FILTER (2)			0.8										0.7						SCROLL SAW	3/4"	12	1	20	30
31	20	1	12	3/4"	AIR FILTER (2)			0.8										0.9						BELT SANDER	3/4"	12	1	20	32
33	25	2	12	3/4"	DUST COLLECTOR 3-#10 & 1-#10G IN 3/4"C			1.2																SPARE			1	20	34
35								1.2																SPARE			1	20	36
37	20	1			SPARE													5.8						DUST COLLECTION 3-#3 & 1-#8G IN 1.5"C	1 1/2"	3	3	90	38
39	20	1			SPARE													5.8											40
41	20	1			SPARE													5.8											42
43	20	1			SPARE																			SPARE			1	20	44
45	20	1			SPARE																			SPARE			1	20	46
47	20	1			SPARE																			SPARE			1	20	48
49	20	1			SPARE																			SPARE			1	20	50
51	20	1			SPARE																			SPACE			1		52
53	20	1	12	3/4"	EMERGENCY SWITCH							0.1												SPACE			1		54
55																								SPACE			1		56
57	30	3	10	3/4"	TVSS 3-#10 & 1-#10G IN 3/4"C																			SPACE			1		58
59																								SPACE			1		60
LIGHTING (KVA):					0.0	0.0	3.6	5.6	0.0	0.0	0.0	0.1				0.0	0.4	30.5	0.0	0.0	0.0	0.0	CONNECTED LOAD (KVA):					40.2
RECEPTACLES (KVA):					4.0																			DEMAND LOAD (KVA):					44.5
MOTORS (KVA):					36.1								PHASE A			14	114.2												
A/C (KVA):					0.0								PHASE B			13	109.6							CONNECTED LOAD (AMPS):					111.6
HEATING (KVA):					0.0								PHASE C			13	111.2							DEMAND LOAD (AMPS):					123.6
KITCHEN (KVA):					0.0											KVA	AMPS												
MISCELLANEOUS (KVA):					0.1																								

NOTES: PANEL TO BE PROVIDED WITH SHUNT TRIP THAT CUTS OFF ALL POWER BY ACTIVATION OF PUSH BUTTON EMERGENCY STOP

SHUNTED PANELBOARD SCHEDULE - 'S4' WELDING

MAIN: 200A MCB | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	B	C	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9						1.6						SAW 4-#8 & 1-#10G IN 1"C	1"	6	3	50	2
3												2.9						1.6											4
5	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9						1.6											6
7												2.9					0.2						CORD REEL (GFI BREAKER)	3/4"	12	1	20	8
9	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9					0.2							CORD REEL (GFI BREAKER)	3/4"	12	1	20	10
11												2.9					0.2							CORD REEL (GFI BREAKER)	3/4"	12	1	20	12
13	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9												SPARE			1	20	14
15												2.9						1.6						PUNCH PRESS 4-#12 & 1-#12G IN 3/4"C	3/4"	12	3	20	16
17	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9						1.6											18
19												2.9						1.6											20
21	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9					0.4							RECEPT - GENERAL	3/4"	12	1	20	22
23												2.9					0.6							RECEPT - GENERAL	3/4"	12	1	20	24
25	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9					0.6							RECEPT - GENERAL	3/4"	12	1	20	26
27												2.9					0.4							RECEPT - EXTERIOR	3/4"	12	1	20	28
29	20	1			SPARE												0.4							RECEPT - EXTERIOR	3/4"	12	1	20	30
31	20	1			SPARE																			SPARE			1	20	32
33	20	1			SPARE																			SPARE			1	20	34
35	20	1	12	3/4"	EMERGENCY SWITCH							0.1												SPARE			1	20	36
37																								SPARE			1	20	38
39	30	3	10	3/4"	TVSS 3-#10 & 1-#10G IN 3/4"C																			SPARE			1	20	40
41																								SPARE			1	20	42
LIGHTING (KVA):					0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9				0.0	3.0	9.5	0.0	0.0	0.0	0.0	CONNECTED LOAD (KVA):					53.4
RECEPTACLES (KVA):					3.0																			DEMAND LOAD (KVA):					54.6
MOTORS (KVA):					9.5								PHASE A			19	154.4												
A/C (KVA):					0.0								PHASE B			19	156.1							CONNECTED LOAD (AMPS):					148.1
HEATING (KVA):					0.0								PHASE C			16	134.3							DEMAND LOAD (AMPS):					151.4
KITCHEN (KVA):					0.0											KVA	AMPS												
MISCELLANEOUS (KVA):					40.9																								

NOTES: PANEL TO BE PROVIDED WITH SHUNT TRIP THAT CUTS OFF ALL POWER BY ACTIVATION OF PUSH BUTTON EMERGENCY STOP

SHUNTED PANELBOARD SCHEDULE - 'S5' WELDING

MAIN: 400A MCB | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	B	C	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9						2.1						CNC 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	2
3												2.9						2.1											4
5	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9					0.2							CORD REEL	3/4"	12	1	20	6
7												2.9					0.2							CORD REEL	3/4"	12	1	20	8
9	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9					0.2							CORD REEL	3/4"	12	1	20	10
11												2.9						1.2						DRILL PRESS	3/4"	12	1	20	12
13	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9						1.2						GRINDER	3/4"	12	1	20	14
15												2.9												SPARE			1	20	16
17	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9												SPARE			1	20	18
19												2.9												SPARE			1	20	20
21	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9												SPARE			1	20	22
23												2.9												SPARE			1	20	24
25	50	2	6	1 1/4"	WELDER 3-#6 & 1-#10G IN 1.25"C							2.9												SPARE			1	20	26
27												2.9												SPARE			1	20	28
29	20	1			SPARE																			SPARE			1	20	30
31	20	1			SPARE											0.0	0.0	8.6	0.0	0.0	0.0	0.0	PANEL F1 4-#3 & 1-#6G IN 1.5"C	1 1/2"	3▲	3	80	32
33	20	1			SPARE											0.0	0.0	5.8	0.0	0.0	0.0	0.0						34
35	20	1	12	3/4"	EMERGENCY SWITCH							0.1				0.0	0.0	5.8	0.0	0.0	0.0	0.0						36
37																0.0	0.0	8.6	0.0	0.0	0.0	0.0						38
39	30	3	10	3/4"	TVSS 3-#10 & 1-#10G IN 3/4"C											0.0	0.0	5.8	0.0	0.0	0.0	0.0	PANEL F2 4-#3 & 1-#6G IN 1.5"C	1 1/2"	3▲	3	80	40
41																0.0	0.0	5.8	0.0	0.0	0.0	0.0						42
LIGHTING (KVA):					0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9				0.0	0.6	46.9	0.0	0.0	0.0	0.0	CONNECTED LOAD (KVA):					88.3
RECEPTACLES (KVA):					0.6																			DEMAND LOAD (KVA):					89.4
MOTORS (KVA):					46.9								PHASE A			35	294.3												
A/C (KVA):					0.0								PHASE B			28	236.3							CONNECTED LOAD (AMPS):					245.2
HEATING (KVA):					0.0								PHASE C			25	205.6							DEMAND LOAD (AMPS):					248.1
KITCHEN (KVA):					0.0											KVA	AMPS												
MISCELLANEOUS (KVA):					40.9																								

NOTES: PANEL TO BE PROVIDED WITH SHUNT TRIP THAT CUTS OFF ALL POWER BY ACTIVATION OF PUSH BUTTON EMERGENCY STOP
▲ INDICATES THAT WIRE SIZE HAS BEEN INCREASED FOR VOLTAGE DROP.

BRL DEMAND CALCS

LIGHTING	0.00	KVA	X	125	%	= 0.0 KVA
RECEPTAC TOTAL	1.00	KVA				
1ST	10.00	KVA	X	100	%	= 1.0 KVA
REMAIN	0.00	KVA	X	50	%	= 0.0 KVA
MOTORS	0.00	KVA	X	100	%	= 0.0 KVA
LARGEST	1.44	KVA	X	125	%	= 1.8 KVA
A/C	0.00	KVA	X	100	%	= 0.0 KVA
HEATING	0.00	KVA	X	100	%	= 0.0 KVA
FUTURE	____	KVA	X	100	%	= 0.0 KVA
KITCHEN	0.00	KVA	X	65	%	= 0.0 KVA
MISCELLANEOUS	3.80	KVA	X	100	%	= 3.8 KVA
TOTAL	= 18.3 amps					= 6.6 KVA

S3 DEMAND CALCS

LIGHTING	0.00	KVA	X	125	%	= 0.0 KVA
RECEPTAC TOTAL	4.00	KVA				
1ST	10.00	KVA	X	100	%	= 4.0 KVA
REMAIN	0.00	KVA	X	50	%	= 0.0 KVA
MOTORS	18.70	KVA	X	100	%	= 18.7 KVA
LARGEST	17.40	KVA	X	125	%	= 21.8 KVA
A/C	0.00	KVA	X	100	%	= 0.0 KVA
HEATING	0.00	KVA	X	100	%	= 0.0 KVA
FUTURE	____	KVA	X	100	%	= 0.0 KVA
KITCHEN	0.00	KVA	X	65	%	= 0.0 KVA
MISCELLANEOUS	0.10	KVA	X	100	%	= 0.1 KVA
TOTAL	= 123.6 amps					= 44.5 KVA

S1 DEMAND CALCS

LIGHTING	0.00	KVA	X	125	%	= 0.0 KVA
RECEPTAC TOTAL	4.80	KVA				
1ST	10.00	KVA	X	100	%	= 4.8 KVA
REMAIN	0.00	KVA	X	50	%	= 0.0 KVA
MOTORS	39.60	KVA	X	100	%	= 39.6 KVA
LARGEST	4.40	KVA	X	125	%	= 5.5 KVA
A/C	0.00	KVA	X	100	%	= 0.0 KVA
HEATING	0.00	KVA	X	100	%	= 0.0 KVA
FUTURE	____	KVA	X	100	%	= 0.0 KVA
KITCHEN	0.00	KVA	X	65	%	= 0.0 KVA
MISCELLANEOUS	0.10	KVA	X	100	%	= 0.1 KVA
TOTAL	= 138.8 amps					= 50.0 KVA

S4 DEMAND CALCS

LIGHTING	0.00	KVA	X	125	%	= 0.0 KVA
RECEPTAC TOTAL	3.00	KVA				
1ST	10.00	KVA	X	100	%	= 3.0 KVA
REMAIN	0.00	KVA	X	50	%	= 0.0 KVA
MOTORS	4.75	KVA	X	100	%	= 4.8 KVA
LARGEST	4.75	KVA	X	125	%	= 5.9 KVA
A/C	0.00	KVA	X	100	%	= 0.0 KVA
HEATING	0.00	KVA	X	100	%	= 0.0 KVA
FUTURE	____	KVA	X	100	%	= 0.0 KVA
KITCHEN	0.00	KVA	X	65	%	= 0.0 KVA
MISCELLANEOUS	40.87	KVA	X	100	%	= 40.9 KVA
TOTAL	= 151.4 amps					= 54.6 KVA

S2 DEMAND CALCS

LIGHTING	0.00	KVA	X	125	%	= 0.0 KVA
RECEPTAC TOTAL	5.60	KVA				
1ST	10.00	KVA	X	100	%	= 5.6 KVA
REMAIN	0.00	KVA	X	50	%	= 0.0 KVA
MOTORS	6.30	KVA	X	100	%	= 6.3 KVA
LARGEST	1.50	KVA	X	125	%	= 1.9 KVA
A/C	0.00	KVA	X	100	%	= 0.0 KVA
HEATING	0.00	KVA	X	100	%	= 0.0 KVA
FUTURE	____	KVA	X	100	%	= 0.0 KVA
KITCHEN	0.00	KVA	X	65	%	= 0.0 KVA
MISCELLANEOUS	1.30	KVA	X	100	%	= 1.3 KVA
TOTAL	= 41.8 amps					= 15.1 KVA

S4 DEMAND CALCS

LIGHTING	0.00	KVA	X	125	%	= 0.0 KVA
RECEPTAC TOTAL	3.00	KVA				
1ST	10.00	KVA	X	100	%	= 3.0 KVA
REMAIN	0.00	KVA	X	50	%	= 0.0 KVA
MOTORS	4.75	KVA	X	100	%	= 4.8 KVA
LARGEST	4.75	KVA	X	125	%	= 5.9 KVA
A/C	0.00	KVA	X	100	%	= 0.0 KVA
HEATING	0.00	KVA	X	100	%	= 0.0 KVA
FUTURE	____	KVA	X	100	%	= 0.0 KVA
KITCHEN	0.00	KVA	X	65	%	= 0.0 KVA
MISCELLANEOUS	40.87	KVA	X	100	%	= 40.9 KVA
TOTAL	= 151.4 amps					= 54.6 KVA

PANELBOARD SCHEDULE - 'BRL' BOILER ROOM

MAIN: 200A MLO | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	B	C	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	20	1	12	3/4"	RECEPT - EXTERIOR		0.4										0.6						RECEPT - BOILER ROOM	3/4"	12	1	20	2
3	20	1	12	3/4"	FIRE SPRINKLER POWER																	0.5	SPRINKLER HOTBOX	3/4"	12	1	20	4
5	20	1	12	3/4"	BOILER			1.4														0.8	CHILLER EXT. HEAT TAPE	3/4"	12	1	20	6
7	20	1			SPARE																	0.8	CHILLER EXT. HEAT TAPE	3/4"	12	1	20	8
9	20	1			SPARE																	0.8	CHILLER INT. HEAT TAPE	3/4"	12	1	20	10
11	20	1			SPARE																	0.4	CHILLER CONTROL	3/4"	12	1	20	12
13	20	1			SPARE																		SPARE			1	20	14
15	20	1			SPARE																		SPARE			1	20	16
17	20	1			SPARE																		SPARE			1	20	18
19	20	1			SPARE																		SPARE			1	20	20
21	20	1			SPARE																		SPARE			1	20	22
23	20	1			SPARE																		SPARE			1	20	24
25	20	1			SPARE																		SPARE			1	20	26
27		1			SPACE																		SPARE			1	20	28
29		1			SPACE																		SPARE			1	20	30
31		1			SPACE																		SPARE			1	20	32
33		1			SPACE																		SPACE			1		34
35		1			SPACE																		SPACE			1		36
37																							SPACE			1		38
39	30	3	10	3/4"	TVSS 3-#10 & 1-#10G IN 3/4"C																		SPACE			1		40
41																							SPACE			1		42
LIGHTING (KVA):					0.0	0.0	0.4	1.4	0.0	0.0	0.0	0.5					0.0	0.6	0.0	0.0	0.0	0.0	3.3	CONNECTED LOAD (KVA):					6.2
RECEPTACLES (KVA):					1.0																			DEMAND LOAD (KVA):					6.6
MOTORS (KVA):					1.4								PHASE A			2	15.0												
A/C (KVA):					0.0								PHASE B			2	15.0							CONNECTED LOAD (AMPS):					17.3
HEATING (KVA):					0.0								PHASE C			3	22.0							DEMAND LOAD (AMPS):					18.3
KITCHEN (KVA):					0.0											KVA	AMPS												
MISCELLANEOUS (KVA):					3.8																								

NOTES:

SHUNTED PANELBOARD SCHEDULE - 'S1' HVAC

MAIN: 200A MCB | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	B	C	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.8						RECEPT - GENERAL	3/4"	12	1	20	2
3	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.6						RECEPT - EXTERIOR	3/4"	12	1	20	4
5	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.6						RECEPT - TS/VM	3/4"	12	1	20	6
7	20	1	12	3/4"	CORD REEL (GFI BREAKER)		0.2											0.8						RECEPT - CLASSROOM	3/4"	12	1	20	8
9	30	2	10	3/4"	HVAC SYS 4 3-#10 & 1-#10G IN 3/4"C			2.2											2.2					HVAC SYS 1 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	10
11								2.2											2.2										12
13	30	2	10	3/4"	HVAC SYS 4 3-#10 & 1-#10G IN 3/4"C			2.2											2.2					HVAC SYS 1 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	14
15								2.2											2.2										16
17	30	2	10	3/4"	HVAC SYS 5 3-#10 & 1-#10G IN 3/4"C			2.2											2.2					HVAC SYS 2 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	18
19								2.2											2.2										20
21	30	2	10	3/4"	HVAC SYS 5 3-#10 & 1-#10G IN 3/4"C			2.2											2.2					HVAC SYS 2 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	22
23								2.2											2.2										24
25	20	1	12	3/4"	RECEPT - HVAC SERVICE INT.		0.6												2.2					HVAC SYS 3 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	26
27	20	1	12	3/4"	RECEPT- HVAC SERVICE EXT.		0.6												2.2										28
29	20	1			SPARE														2.2					HVAC SYS 3 3-#10 & 1-#10G IN 3/4"C	3/4"	10	2	30	30
31	20	1			SPARE														2.2										32
33	20	1			SPARE																			SPARE			1	20	34
35	20	1	12	3/4"	EMERGENCY SWITCH											0.1								SPARE			1	20	36
37																								SPARE			1	20	38
39	30	3	10	3/4"	TVSS 3-#10 & 1-#10G IN 3/4"C																			SPARE			1	20	40
41																		