

Battery/Power Calculation Form

Project: Summit at West Pryor

Location: FACP

Notes: Roots Restaurant Tenant Finish

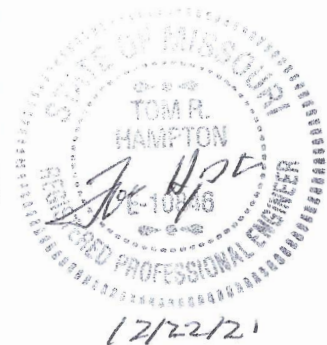
* added

Standby: 24 Hours (1440) Minutes

Device	Quantity		Current - Amp/Hr.		Total
FACP (S3)	1	X	0.1110	X24	2.6640
Smoke Detector	44	X	0.0003	X24	0.3168
Heat Detector	3	X	0.0003	X24	0.0216
Duct Detector	0	X	0.0003	X24	
CO Detector	1	X	0.0003	X24	0.0072
Pull Station	10	X	0.0003	X24	0.0720
Monitor Module	18	X	0.000375	X24	0.1620
Control Module	27	X	0.000375	X24	0.2430
Remote Annunciator	1	X	0.05	X24	1.2000
110cd Horn/Strobe	1	X	0	X24	
75cd Horn/Strobe	3	X	0	X24	
30cd Horn/Strobe	3	X	0	X24	
15cd Horn/Strobe	12	X	0	X24	
110cd Strobe Only	0	X	0	X24	
75cd Strobe Only	0	X	0	X24	
30cd Strobe Only	1	X	0	X24	
15cd Strobe Only	7	X	0	X24	
Subtotal:					4.6866
Add 30% for battery depletion:					1.4060
Standby Subtotal:					6.0926

*2 added

*1 added



Alarm Mode: 10 Minutes

Device	Quantity		Current - Amp/Hr.		Total
FACP (S3)	1	X	0.2430	÷6	0.0405
Smoke Detector	44	X	0.0065	÷6	0.0477
Heat Detector	3	X	0.0065	÷6	0.0033
Duct Detector	0	X	0.0065	÷6	
CO Detector	1	X	0.0072	÷6	0.0012
Pull Station	10	X	0.003	÷6	0.0050
Monitor Module	18	X	0.0006	÷6	0.0018
Control Module	27	X	0.0065	÷6	0.0293
Remote Annunciator	1	X	0.075	÷6	0.0125
110cd Horn/Strobe	1	X	0.162	÷6	0.0270
75cd Horn/Strobe	3	X	0.121	÷6	0.0605
30cd Horn/Strobe	3	X	0.074	÷6	0.0370
15cd Horn/Strobe	12	X	0.054	÷6	0.1080
110cd Strobe Only	0	X	0.148	÷6	
75cd Strobe Only	0	X	0.107	÷6	
30cd Strobe Only	1	X	0.063	÷6	0.0105
15cd Strobe Only	7	X	0.043	÷6	0.0502
Subtotal:					0.4343
Add 30% for battery depletion:					0.1303
Alarm Mode Subtotal:					0.5646

*2 added

*1 added

Standby Subtotal: 6.0926
 Plus Alarm Mode Subtotal: 0.5646
 System Current Demand: 6.6572

Battery Size: 12vdc 10AH
 Battery Quantity: 2
 Battery Total: 24vdc 10AH

Battery/Power Calculation FormProject: W.Pryor RetailLocation: NACNotes: Roots Restaurant Tenant Finish

* added

Standby: 24 Hours (1440) Minutes

Device	Quantity		Current - Amp/Hr.		Total
HPF24S6	1	X	0.0750000	X24	1.8000
A/V 95cd	7	X	0	X24	
A/V 75cd	1	X	0	X24	
A/V 30cd	0	X	0	X24	
A/V 15cd	11	X	0	X24	
Strobe only 95cd	0	X	0	X24	
Strobe only 75cd	0	X	0	X24	
Strobe only 30cd	0	X	0	X24	
Strobe only 15cd	14	X	0	X24	
Strobe only 185cd	0	X	0	X24	
.		X		X24	
Subtotal:					1.8000
Add 30% for battery depletion:					0.5400
Standby Subtotal:					2.3400

*3 added

*6 added

*2 added

Alarm Mode: 10 Minutes

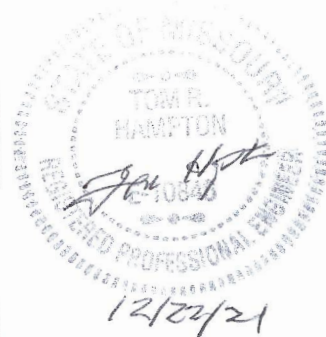
Device	Quantity		Current - Amp/Hr.		Total
HPF24S6	1	X	0.1750	÷6	0.0292
A/V 95cd	7	X	0.162	÷6	0.1890
A/V 75cd	1	X	0.121	÷6	0.0202
A/V 30cd	0	X	0.074	÷6	
A/V 15cd	11	X	0.054	÷6	0.0990
Strobe only 95cd	0	X	0.148	÷6	
Strobe only 75cd	0	X	0.107	÷6	
Strobe only 30cd	0	X	0.063	÷6	
Strobe only 15cd	14	X	0.043	÷6	0.0502
Strobe only 185cd	0	X	0.222	÷6	
.	0	X		÷6	
Subtotal:					0.3875
Add 30% for battery depletion:					0.1163
Alarm Mode Subtotal:					0.5038

*3 added

*6 added

*2 added

Standby Subtotal:	2.3400	Battery Size:	12vdc 7AH
Plus Alarm Mode Subtotal:	0.5038	Battery Quantity:	2
System Current Demand:	2.8438	Battery Total:	24vdc 7AH



PROJECT DETAILS

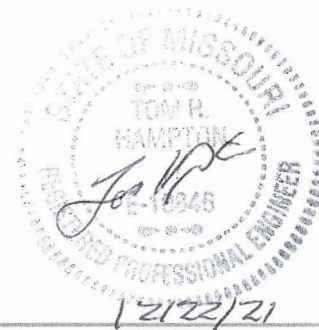
Project Name : Summit at W.Pryor -
Tenant Finish Retail 6-8

Project Code :

Project Location :
, Missouri

PREPARED BY

Ryan Stacy

**Voltage Drop Calculations**

POWER SOURCE : NAC 1 MODEL NUMBER : HPF24S6 BRAND : HPP CLASS B 20.4 VOLTS DC POWER

CIRCUIT: NAC Circuit 1 3 Amps 14 AWG 17 DEVICES 31.63 % (0.949) AMPS USED 3.27 % (0.667) VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	ZONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
1	PC2RL	15	Temporal	High	Electromechanical	0.071	12	20.354	20.327	20.284	20.216
2	SCRL	15				0.041	16	20.298	20.237	20.141	19.989
3	SCRL	15				0.041	10	20.264	20.184	20.056	19.854
4	PC2RL	15	Temporal	High	Electromechanical	0.071	10	20.232	20.133	19.975	19.725
5	SCRL	15				0.041	8	20.209	20.096	19.916	19.631
6	PC2RL	75	Temporal	High	Electromechanical	0.143	19	20.157	20.013	19.784	19.421
7	SCRL	15				0.041	22	20.109	19.937	19.663	19.229
8	PC2RL	15	Temporal	High	Electromechanical	0.071	16	20.077	19.886	19.582	19.100
9	SCRL	15				0.041	17	20.048	19.839	19.508	18.982
10	SCRL	15				0.041	9	20.034	19.817	19.473	18.926
11	SCRL	15				0.041	9	20.021	19.797	19.441	18.876
12	SCRL	15				0.041	9	20.010	19.779	19.413	18.831
13	PC2RL	15	Temporal	High	Electromechanical	0.071	7	20.003	19.767	19.394	18.801
14	SCRL	15				0.041	15	19.991	19.748	19.364	18.754
15	SCRL	15				0.041	10	19.985	19.738	19.348	18.729
16	PC2RL	15	Temporal	High	Electromechanical	0.071	4	19.983	19.735	19.343	18.722
17	SCRL	15				0.041	9	19.982	19.733	19.339	18.716
Voltage Drop								0.418	0.667	1.061	1.684

POWER SOURCE : NAC 1 MODEL NUMBER : HPF24S6 BRAND : HPP CLASS B 20.4 VOLTS DC POWER

CIRCUIT: NAC Circuit 2 3 Amps 14 AWG 5 DEVICES 23.37 % (0.701) AMPS USED 2.14 % (0.436) VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	TONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
1	SCRL	15				0.041	36	20.299	20.239	20.144	19.992
2	PC2RL	95	Temporal	High	Electromechanical	0.165	19	20.249	20.159	20.017	19.789
3	PC2RL	95	Temporal	High	Electromechanical	0.165	26	20.197	20.077	19.886	19.581
4	PC2RL	95	Temporal	High	Electromechanical	0.165	41	20.143	19.991	19.749	19.362
5	PC2RL	95	Temporal	High	Electromechanical	0.165	26	20.126	19.964	19.705	19.293
Voltage Drop								0.274	0.436	0.695	1.107

POWER SOURCE : NAC 1 MODEL NUMBER : HPF24S6 BRAND : HPP CLASS B 20.4 VOLTS DC POWER

CIRCUIT: NAC Circuit 3 3 Amps 14 AWG 11 DEVICES 33.43 % (1.003) AMPS USED 5.56 % (1.134) VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	TONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
1	PC2RL	15	Temporal	High	Electromechanical	0.071	90	20.037	19.824	19.483	18.941
2	SCRL	15				0.041	11	19.996	19.759	19.379	18.775
3	SCRL	15				0.041	10	19.960	19.702	19.288	18.631
4	PC2RL	95	Temporal	High	Electromechanical	0.165	15	19.909	19.621	19.158	18.425
5	PC2RL	95	Temporal	High	Electromechanical	0.165	23	19.846	19.520	18.998	18.170
6	PC2RL	15	Temporal	High	Electromechanical	0.071	17	19.810	19.464	18.908	18.027
7	PC2RL	15	Temporal	High	Electromechanical	0.071	23	19.768	19.398	18.803	17.860
8	PC2RL	15	Temporal	High	Electromechanical	0.071	16	19.744	19.359	18.742	17.762
9	PC2RL	15	Temporal	High	Electromechanical	0.071	17	19.723	19.326	18.689	17.678
10	PC2RL	95	Temporal	High	Electromechanical	0.165	33	19.692	19.276	18.610	17.552
11	PC2RL	15	Temporal	High	Electromechanical	0.071	22	19.686	19.266	18.594	17.527
Voltage Drop								0.714	1.134	1.806	2.873