

Battery/Power Calculation Form

Project: Summit at West Pryor

Location: FACP

Notes: Pet People 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	7	X	0.0003	X24	0.0504
Monitor Module	17	X	0.000375	X24	0.1530
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:					4.6560
Add 30% for battery depletion:					1.3968
Standby Subtotal:					6.0528

*2 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	7	X	0.003	÷6	0.0035
Monitor Module	17	X	0.0006	÷6	0.0017
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:					0.4327
Add 30% for battery depletion:					0.1298
Alarm Mode Subtotal:					0.5626

*2 added

Standby Subtotal:	6.0528	Battery Size:	12vdc 10AH
Plus Alarm Mode Subtotal:	0.5626	Battery Quantity:	2
System Current Demand:	6.6154	Battery Total:	24vdc 10AH

Battery/Power Calculation Form

Project: W.Pryor RetailLocation: NACNotes: Pet People 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	4	X	0	X24	
A/V 75cd	1	X	0	X24	
A/V 30cd	0	X	0	X24	
A/V 15cd	5	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	12	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

*4 added

*1 added

Alarm Mode: 10 Minutes

Device	Quantity		Current - Amp/Hr.		Total
HPF24S6	1	X	0.1750	÷6	0.0292
A/V 95cd	4	X	0.162	÷6	0.1080
A/V 75cd	1	X	0.121	÷6	0.0202
A/V 30cd	0	X	0.074	÷6	
A/V 15cd	5	X	0.054	÷6	0.0450
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	12	X	0.043	÷6	0.0430
Strobe only 185cd	0	X	0.222	÷6	
.	0	X		÷6	
Subtotal:					0.2453
Add 30% for battery depletion:					0.0736
Alarm Mode Subtotal:					0.3189

*4 added

*1 added

Standby Subtotal: 2.3400
 Plus Alarm Mode Subtotal: 0.3189
 System Current Demand: 2.6589

Battery Size: 12vdc 7AH
 Battery Quantity: 2
 Battery Total: 24vdc 7AH



PROJECT DETAILS

Project Name : Summit at W.Pryor -
MassageLux & PetPeople

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	TONE	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

