

### Battery/Power Calculation Form

Project: Summit at West Pryor

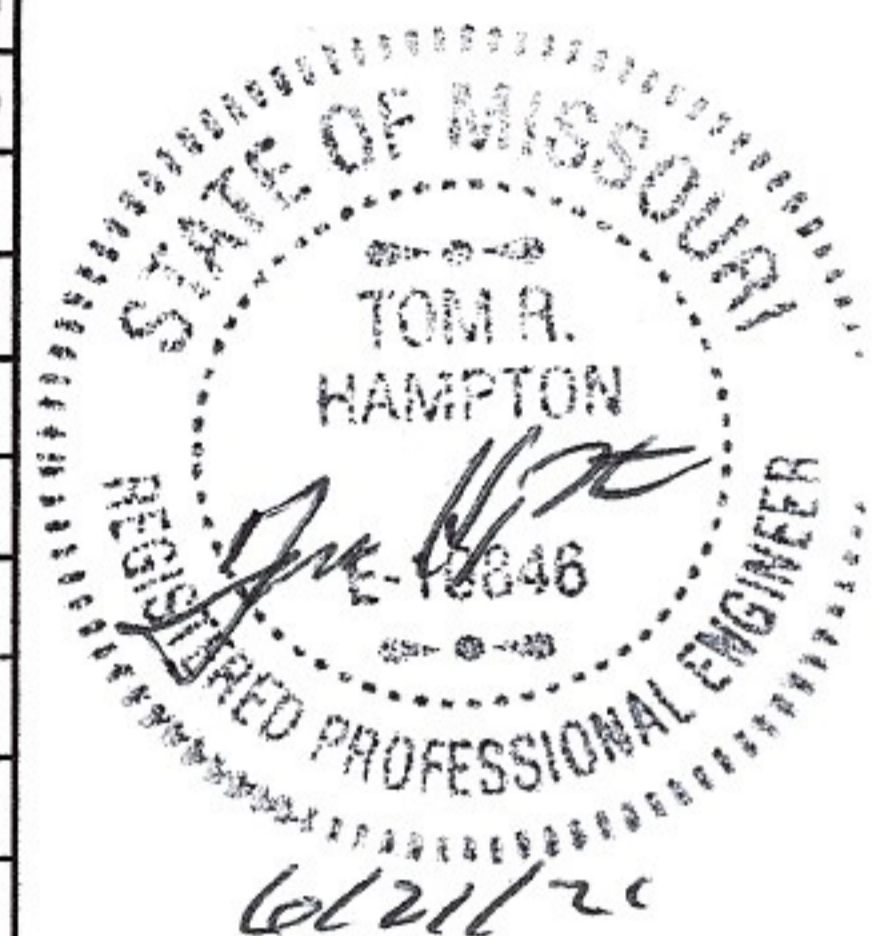
Location: FACP

Notes: Club Pilates 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	43	X	0.0003	X24	0.3096
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	3	X	0.0003	X24	0.0216
Monitor Module	17	X	0.000375	X24	0.1530
Control Module	26	X	0.000375	X24	0.2340
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:					4.6110
Add 30% for battery depletion:					1.3833
Standby Subtotal:					5.9943



Alarm Mode: 10 Minutes

Device	Quantity		Current - Amp/Hr.		Total
FACP (S3)	1	X	0.2430	÷6	0.0405
Smoke Detector	43	X	0.0065	÷6	0.0466
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	3	X	0.003	÷6	0.0015
Monitor Module	17	X	0.0006	÷6	0.0017
Control Module	26	X	0.0065	÷6	0.0282
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:					0.4286
Add 30% for battery depletion:					0.1286
Alarm Mode Subtotal:					0.5571

Standby Subtotal: 5.9943  
 Plus Alarm Mode Subtotal: 0.5571  
 System Current Demand: 6.5514

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



### Battery/Power Calculation Form

Project: Club Pilates

Location: NAC

Notes: Located in Power Life Tenant \*added

Standby: 24 Hours (1440) Minutes

Device	Quantity		Current - Amp/Hr.		Total
HPF24S6	1	X	0.0750000	X24	1.8000
A/V 95cd	2	X	0	X24	
A/V 75cd	3	X	0	X24	*2 added
A/V 30cd	0	X	0	X24	
A/V 15cd	5	X	0	X24	*2 added
Strobe only 95cd	0	X	0	X24	
Strobe only 75cd	0	X	0	X24	
Strobe only 30cd	0	X	0	X24	
Strobe only 15cd	4	X	0	X24	*1 added
Strobe only 185cd	0	X	0	X24	
.		X		X24	
Subtotal:					1.8000
Add 30% for battery depletion:					0.5400
Standby Subtotal:					2.3400

Alarm Mode: 10 Minutes

Device	Quantity		Current - Amp/Hr.		Total
HPF24S6	1	X	0.1750	÷6	0.0292
A/V 95cd	2	X	0.162	÷6	0.0540
A/V 75cd	3	X	0.121	÷6	0.0605
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	4	X	0.043	÷6	0.0143
Strobe only 185cd	0	X	0.222	÷6	
.	0	X		÷6	
Subtotal:					0.2030
Add 30% for battery depletion:					0.0609
Alarm Mode Subtotal:					0.2639

Standby Subtotal:	<u>2.3400</u>	Battery Size:	<u>12vdc 7AH</u>
Plus Alarm Mode Subtotal:	<u>0.2639</u>	Battery Quantity:	<u>2</u>
System Current Demand:	<u>2.6039</u>	Battery Total:	<u>24vdc 7AH</u>



**PROJECT DETAILS**

Project Name : Summit at W.Pryor - Club  
Pilates Tenant Finish

Project Code :

Project Location :  
Lee's Summit, 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    9 DEVICES    25.6 % (0.768) AMPS USED    2.25 % (0.458) VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	ZONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
1	SCRL	15				0.041	15	20.354	<b>20.327</b>	20.283	20.214
2	PC2RL	15	Temporal	High	Electromechanical	0.071	10	20.325	<b>20.281</b>	20.209	20.097
3	PC2RL	15	Temporal	High	Electromechanical	0.071	15	20.285	<b>20.218</b>	20.109	19.938
4	PC2RL	15	Temporal	High	Electromechanical	0.071	15	20.250	<b>20.162</b>	20.020	19.796
5	SCRL	15				0.041	10	20.229	<b>20.129</b>	19.968	19.713
6	SCRL	15				0.000	6	20.218	<b>20.111</b>	19.939	19.667
7	PC2RL	95	Temporal	High	Electromechanical	0.165	35	20.151	<b>20.005</b>	19.771	19.399
8	PC2RL	75	Temporal	High	Electromechanical	0.143	20	20.126	<b>19.966</b>	19.708	19.299
9	PC2RL	95	Temporal	High	Electromechanical	0.165	23	20.111	<b>19.942</b>	19.669	19.238
Voltage Drop								0.289	0.458	0.731	1.162

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    15.63 % (0.469) AMPS USED    1.36 % (0.277) VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	ZONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
1	SCRL	15				0.041	55	20.296	<b>20.235</b>	20.138	19.983
2	PC2RL	15	Temporal	High	Electromechanical	0.071	9	20.281	<b>20.210</b>	20.099	19.921
3	PC2RL	15	Temporal	High	Electromechanical	0.071	13	20.262	<b>20.180</b>	20.052	19.846
4	PC2RL	75	Temporal	High	Electromechanical	0.143	19	20.240	<b>20.145</b>	19.997	19.758
5	PC2RL	75	Temporal	High	Electromechanical	0.143	24	20.226	<b>20.123</b>	19.962	19.703
Voltage Drop								0.174	0.277	0.438	0.697



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

CIRCUIT: NAC Circuit 3    3 Amps    14 AWG    0 DEVICES    0 AMPS USED    0 VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	TONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
No Devices Found											

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

CIRCUIT: NAC Circuit 4    3 Amps    14 AWG    0 DEVICES    0 AMPS USED    0 VOLTAGE DROP

#	MODEL	CANDELA	PATTERN	VOLUME	TONE	CURRENT (amps)	DISTANCE FROM PREVIOUS DEVICE (Ft)	12 AWG	14 AWG	16 AWG	18 AWG
No Devices Found											