SILENT KNIGHT

5700 Calculations

Version 08.06.13

Global Project Values:

Project Name: Evo Rock and Fitness

Project ID:

Prepared By: Gene Piersing

Date:

Standby H

Alarm

Derating Fa

Voltage Drop Wa Thresho

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Panel ID: 5700

Location: Front Door

Model: 5700 Add. Fire Alarm Control Panel

Volts: 24 VDC

Max NAC Current: 2.5 Amps

Max Panel Current: 2.5 Amps

Ckt.#	Circuit Name	Qty	Current Draw Standby	Current Draw Alarm	Wire AWG & Type	Ohms Per 1000 Ft.	Length(ft) One-Way	Actual Ohms	Volts @ EOL	%Drop
5700	5700 CTRL Panel	1	0.200	0.365						
SK	Photo, Photo-T, PhotoR	1	0.000	0.000						
SK	Ion		0.000	0.000						
SK	Heat, Heat-HT, ROR		0.000	0.000						
SK	Beam, Beam-T		0.000	0.000						
SK	Duct	1	0.000	0.000						
SK	Acclimate		0.000	0.000						
SK	FIRE-CO		0.000	0.000						
SK	Control		0.000	0.000						
SK	Control-6		0.000	0.000						
SK	RelayMon-2		0.000	0.000						
SK	Monitor, Minimon	2	0.001	0.001						
SK	Monitor-2		0.000	0.000						
SK	Monitor-10		0.000	0.000						
SK	Pull-SA, Pull-DA	4	0.002	0.002						
SK	Relay	1	0.000	0.000						
SK	Relay-6		0.000	0.000						
SK	Zone		0.000	0.000			"N/A"			
SK	Zone-6		0.000	0.000						
SK	Isolator Module		0.000	0.000						
B224BI	Isolator Base		0.000	0.000						
B200SR	Sounder Base		0.000	0.000						
B200S	Intelligent Sounder Base		0.000	0.000						
B224RB	Relay Base		0.000	0.000						
RTS151	Magnetic Remote Test		0.000	0.000						
RTS151KEY	Key Activated Test	1	0.000	0.008						
RA100Z	Remote LED		0.000	0.000						
5860	LCD Remote Annunc.		0.000	0.000						
5824	LCD Remote Annunc.		0.000	0.000						
5496	Power Expander		0.000	0.000						
5895XL	Power Expander		0.000	0.000						
5865-3	LED Annunciator (3G)		0.000	0.000						
5865-4	LED Annunciator (4G)		0.000	0.000						
5880	LED Driver Module		0.000	0.000						
5883	Relay Module		0.000	0.000						
NAC #1	Notification Appl Circuit		0.000	1.227	#16 Solid	4.02	190	1.53	18.53	9.19%
NAC #2	Notification Appl Circuit		0.000	0.642	#16 Solid	4.02	275	2.21	18.98	6.96%

Total Standby Current (Amps)	0.203	2.245	Total Alarm Current (Amps)	
Standby Time In Hours	24	0.083	Alarm Time In Minutes / 60	(5 Mins)
Total Standby AH Required	4.875	0.187	Total Alarm AH Required	
Total Combined AH Required	5.06			
Multiply By The Derating Factor	1.60			
Minimum Battery AmpHours Required	**8.10**			

Command Shortcuts

Configure Circuits

Print Page

SILENT KNIGHT

Device Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	*Alarm
1	Unused		
2	Gentex GCC24 Horn/Strobe (15cd)	0.0000	0.1430
3	Gentex GCC24 Horn/Strobe (30cd)	0.0000	0.1530
4	Gentex GCC24 Horn/Strobe (75cd)	0.0000	0.2700
5	Gentex GCC24 Horn/Strobe (95cd)	0.0000	0.3410
6	Gentex GCC24 Horn/Strobe (115cd)	0.0000	0.3830
7	Gentex GCC24 Horn/Strobe (150cd)	0.0000	0.4770
8	Gentex GCS24 Strobe (15cd)	0.0000	0.1200
9	Gentex GCS24 Strobe (30cd)	0.0000	0.1300
10	Gentex GCS24 Strobe (75cd)	0.0000	0.2470
11	Gentex GCS24 Strobe (95cd)	0.0000	0.3180
12	Gentex GCS24 Strobe (115cd)	0.0000	0.3600
13	Gentex GCS24 Strobe (150cd)	0.0000	0.4540
14	Gentex GEC324 Horn/Strobe (15cd)	0.0000	0.1340
15	Gentex GEC324 Horn/Strobe (30cd)	0.0000	0.1520
16	Gentex GEC324 Horn/Strobe (60cd)	0.0000	0.1930
17	Gentex GEC324 Horn/Strobe (75cd)	0.0000	0.2360
18	Gentex GEC324 Horn/Strobe (110cd)	0.0000	0.2800
19	Gentex GES324 Strobe (15cd)	0.0000	0.0780
20	Gentex GES324 Strobe (30cd)	0.0000	0.0960
21	Gentex GES324 Strobe (60cd)	0.0000	0.1370
22	Gentex GES324 Strobe (75cd)	0.0000	0.1800
23	Gentex GES324 Strobe (110cd)	0.0000	0.2240
24	Gentex GEC24 Horn/Strobe (15cd)	0.0000	0.1330
25	Gentex GEC24 Horn/Strobe (30cd)	0.0000	0.1510
26	Gentex GEC24 Horn/Strobe (60cd)	0.0000	0.1920
27	Gentex GEC24 Horn/Strobe (75cd)	0.0000	0.2350
28	Gentex GEC24 Horn/Strobe (110cd)	0.0000	0.2790
29	Gentex GEC24 Horn/Strobe (177cd)	0.0000	0.3430
30	Gentex GEH24 Horn	0.0000	0.0560
31	Gentex GES24 Strobe (15cd)	0.0000	0.0780
32	Gentex GES24 Strobe (30cd)	0.0000	0.0960
33	Gentex GES24 Strobe (60cd)	0.0000	0.1370
34	Gentex GES24 Strobe (75cd)	0.0000	0.1800
35	Gentex GES24 Strobe (110cd)	0.0000	0.2240
36	Gentex GES24 Strobe (177cd)	0.0000	0.2880
37	Gentex GX91 Mini-Horn (Continuous)	0.0000	0.0150
38	Gentex GX93 Mini-Horn (Temporal)	0.0000	0.0220
39	Gentex WGE Strobe (75cd)	0.0000	0.1800

SILENT KNIGHT

Device Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	*Alarm
40	Gentex WGEC Horn/Strobe (75cd)	0.0000	0.2360
41	Silent Knight end of line relay EOL-1224RLY	0.0150	0.0150
42	System Sensor CH Chime	0.0000	0.0540
43	System Sensor CHS Chime/Stobe (15cd)	0.0000	0.0700
44	System Sensor CHS Chime/Stobe (15/75cd)	0.0000	0.0810
45	System Sensor CHS Chime/Strobe (30cd)	0.0000	0.0990
46	System Sensor CHS Chime/Strobe (75cd)	0.0000	0.1650
47	System Sensor CHS Chime/Strobe (95cd)	0.0000	0.1890
48	System Sensor CHS Chime/Strobe (110cd)	0.0000	0.2100
49	System Sensor CHS Chime/Strobe (115cd)	0.0000	0.2170
50	System Sensor HR/HRK/HW Horn	0.0000	0.0690
51	System Sensor MH Mini-Horn	0.0000	0.0290
52	System Sensor P2/PC2 Horn/Strobe (15cd)	0.0000	0.0910
53	System Sensor P2/PC2 Horn/Strobe (15/75cd	0.0000	0.1000
54	System Sensor P2/PC2 Horn/Strobe (30cd)	0.0000	0.1160
55	System Sensor P2/PC2 Horn/Strobe (75cd)	0.0000	0.1760
56	System Sensor P2/PC2 Horn/Strobe (95cd)	0.0000	0.2010
57	System Sensor P2/PC2 Horn/Strobe (110cd)	0.0000	0.2210
58	System Sensor P2/PC2 Horn/Strobe (115cd)	0.0000	0.2290
59	System Sensor P2/PC2 Horn/Strobe (135cd)	0.0000	0.2550
60	System Sensor P2/PC2 Horn/Strobe (150cd)	0.0000	0.2700
61	System Sensor P2/PC2 Horn/Strobe (177cd)	0.0000	0.3020
62	System Sensor P2/PC2 Horn/Strobe (185cd)	0.0000	0.3090
63	System Sensor S/SC Strobe (15cd)	0.0000	0.0660
64	System Sensor S/SC Strobe (15/75cd)	0.0000	0.7700
65	System Sensor S/SC Strobe (30cd)	0.0000	0.9400
66	System Sensor S/SC Strobe (75cd)	0.0000	0.1580
67	System Sensor S/SC Strobe (95cd)	0.0000	0.1810
68	System Sensor S/SC Strobe (110cd)	0.0000	0.2020
69	System Sensor S/SC Strobe (115cd)	0.0000	0.2100
70	System Sensor S/SC Strobe (135cd)	0.0000	0.2280
71	System Sensor S/SC Strobe (150cd)	0.0000	0.2460
72	System Sensor S/SC Strobe (177cd)	0.0000	0.2810
73	System Sensor S/SC Strobe (185cd)	0.0000	0.2860
74	Wheelock AH24 Horn	0.0000	0.0800
75	Wheelock AS241575 Horn/Strobe (1575cd)	0.0000	0.2010
76	Wheelock AS24MCW Horn/Strobe (15cd)	0.0000	0.1680
77	Wheelock AS24MCW Horn/Strobe (30cd)	0.0000	0.2050
78	Wheelock AS24MCW Horn/Strobe (75cd)	0.0000	0.2800
79	Wheelock AS24MCW Horn/Strobe (110cd)	0.0000	0.3470
80	Wheelock AS24MCWH Horn/Strobe (135cd)	0.0000	0.4350
81	Wheelock AS24MCWH Horn/Strobe (185cd)	0.0000	0.5600
82	Wheelock AS24MCC Horn/Strobe (15cd)	0.0000	0.1750
83	Wheelock AS24MCC Horn/Strobe (30cd)	0.0000	0.2180

SILENT KNIGHT

Device Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	*Alarm
84	Wheelock AS24MCC Horn/Strobe (75cd)	0.0000	0.3010
85	Wheelock AS24MCC Horn/Strobe (95cd)	0.0000	0.3650
86	Wheelock AS24MCCH Horn/Strobe (115cd)	0.0000	0.4350
87	Wheelock AS24MCCH Horn/Strobe (177cd)	0.0000	0.5600
88	Wheelock CH70 Chime	0.0000	0.0220
89	Wheelock CH70241575 Chime/Strobe (1575c	0.0000	0.1120
90	Wheelock CH7024MCW Chime/Strobe (15cd)	0.0000	0.0820
91	Wheelock CH7024MCW Chime/Strobe (30cd)	0.0000	0.1140
92	Wheelock CH7024MCW Chime/Strobe (75cd)	0.0000	0.1870
93	Wheelock CH7024MCW Chime/Strobe (110c	0.0000	0.2420
94	Wheelock CH7024MCWH Chime/Strobe (135	0.0000	0.3220
95	Wheelock CH7024MCWH Chime/Strobe (185	0.0000	0.4420
96	Wheelock CH90 Chime	0.0000	0.0220
97	Wheelock CH9024MCC Chime/Strobe (15cd)	0.0000	0.0870
98	Wheelock CH9024MCC Chime/Strobe (30cd)	0.0000	0.1270
99	Wheelock CH9024MCC Chime/Strobe (75cd)	0.0000	0.2110
100	Wheelock CH9024MCC Chime/Strobe (95cd)	0.0000	0.2710
101	Wheelock CH9024MCCH Chime/Strobe (115c	0.0000	0.3220
102	Wheelock CH9024MCCH Chime/Strobe (177c	0.0000	0.4420
103	Wheelock HS24 Horn	0.0000	0.1100
104	Wheelock HS24MCC Horn/Strobe (15cd)	0.0000	0.1750
105	Wheelock HS24MCC Horn/Strobe (30cd)	0.0000	0.2150
106	Wheelock HS24MCC Horn/Strobe (75cd)	0.0000	0.2990
107	Wheelock HS24MCC Horn/Strobe (95cd)	0.0000	0.3590
108	Wheelock HS24MCCH Horn/Strobe (115cd)	0.0000	0.4100
109	Wheelock HS24MCCH Horn/Strobe (177cd)	0.0000	0.5300
110	Wheelock HS4241575W Horn/Strobe (1575c	0.0000	0.2000
111	Wheelock HS424MCW Horn/Strobe (15cd)	0.0000	0.1700
112	Wheelock HS424MCW Horn/Strobe (30cd)	0.0000	0.2020
113	Wheelock HS424MCW Horn/Strobe (75cd)	0.0000	0.2750
114	Wheelock HS424MCW Horn/Strobe (110cd)	0.0000	0.3300
115	Wheelock HS424MCWH Horn/Strobe (135cd)	0.0000	0.4100
116	Wheelock HS424MCWH Horn/Strobe (185cd)	0.0000	0.5300
117	Wheelock MT24 Multitone Appliance	0.0000	0.1420
118	Wheelock MT241575 Multitone/Strobe (1575c	0.0000	0.2320
119	Wheelock MTWP2475 Multitone/Strobe (180c	0.0000	0.2800
120	Wheelock MT24MCW Multitone/Strobe (15cd	0.0000	0.2020
121	Wheelock MT24MCW Multitone/Strobe (30cd	0.0000	0.2340
122	Wheelock MT24MCW Multitone/Strobe (75cd	0.0000	0.3070
123	Wheelock MT24MCW Multitone/Strobe (110c	0.0000	0.3620
124	Wheelock NH24 Horn	0.0000	0.0440
125	Wheelock NS241575W Horn/Strobe (1575cd)	0.0000	0.1480
126	Wheelock NS24MCW Horn/Strobe (15cd)	0.0000	0.1180
127	Wheelock NS24MCW Horn/Strobe (30cd)	0.0000	0.1510

SILENT KNIGHT

Device Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	*Alarm
128	Wheelock NS24MCW Horn/Strobe (75cd)	0.0000	0.2280
129	Wheelock NS24MCW Horn/Strobe (110cd)	0.0000	0.2880
130	Wheelock NS24MCC Horn/Strobe (15cd)	0.0000	0.1260
131	Wheelock NS24MCC Horn/Strobe (30cd)	0.0000	0.1680
132	Wheelock NS24MCC Horn/Strobe (75cd)	0.0000	0.2530
133	Wheelock NS24MCC Horn/Strobe (95cd)	0.0000	0.3190
134	Wheelock NS24MCCH Horn/Strobe (115cd)	0.0000	0.3940
135	Wheelock NS24MCCH Horn/Strobe (177cd)	0.0000	0.5210
136	Wheelock RSS/RSSP241575W Strobe (1575	0.0000	0.0900
137	Wheelock RSS/RSSP24MCW Strobe (15cd)	0.0000	0.0600
138	Wheelock RSS/RSSP24MCW Strobe (30cd)	0.0000	0.0920
139	Wheelock RSS/RSSP24MCW Strobe (75cd)	0.0000	0.1650
140	Wheelock RSS/RSSP24MCW Strobe (110cd)	0.0000	0.2200
141	Wheelock RSS/RSSP24MCWH Strobe (135c	0.0000	0.3000
142	Wheelock RSS/RSSP24MCWH Strobe (185c	0.0000	0.4200
143	Wheelock RSS/RSSP24MCC Strobe (15cd)	0.0000	0.0650
144	Wheelock RSS/RSSP24MCC Strobe (30cd)	0.0000	0.1050
145	Wheelock RSS/RSSP24MCC Strobe (75cd)	0.0000	0.1890
146	Wheelock RSS/RSSP24MCC Strobe (95cd)	0.0000	0.2490
147	Wheelock RSS/RSSP24MCCH Strobe (115cc	0.0000	0.3000
148	Wheelock RSS/RSSP24MCCH Strobe (177cc	0.0000	0.4200
149	Silent Knight SD500-ANM Notification Module	0.0080	0.0600
150	Silent Knight SD500-LED LED Module	0.0100	0.2200
151	Silent Knight SD500-SDM Smoke Det Module	0.0200	0.1060
152	Silent Knight SD505-6SB Sounder Base	0.0010	0.0320
153	Silent Knight SD505-DUCTR Duct w/Relay	0.0200	0.0620
154	User Defined		
155	User Defined		
156	User Defined		
157	User Defined		
158	User Defined		
159	User Defined		
160	User Defined		
161	User Defined		
162	User Defined		

SILENT KNIGHT

Circuit Configuration

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Project Name: Evo Rock and Fitness **Project ID:** 0

Prepared By: Gene Piersing **Date:** 12/3(Date: 09/25/14

Ckt. Number: NAC #1 Panel ID: 5700

Ckt. Name: Notification Appl Circuit Use: Aux Power Circuit

Qty	Device	Current Draw Each Standby	Current Draw Each Alarm	Current Draw Total Standby	Current Draw Total Alarm
	Unused			0.000	0.000
	Unused			0.000	0.000
	Unused			0.000	0.000
	Unused			0.000	0.000
				0.000	0.000
			Totals	0.000	0.000

Ckt. Number: NAC #2 Panel ID: 5700

Ckt. Name: Notification Appl Circuit Use: Aux Power Circuit

Qty	Device	Current Draw Each Standby	Current Draw Each Alarm	Current Draw Total Standby	Current Draw Total Alarm
	Unused			0.000	0.000
	Unused			0.000	0.000
	Unused			0.000	0.000
	Unused			0.000	0.000
				0.000	0.000
			Totals	0.000	0.000

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

SILENT KNIGHT

Notification Appliance Database

Item#	Device / Description	Current Draw In Amperes Standby	Alarm
1	Unused		
2	Gentex GMH-24-X Horn	0.0000	0.0380
3	Gentex GX90-4 Horn	0.0000	0.0150
4	Gentex GX90S-4-15 Horn	0.0000	0.0930
5	Gentex GX90S-4-1575 Horn	0.0000	0.1080
6	Gentex GXS-4-1575 Strobe	0.0000	0.1450
7	Gentex HG124 Horn	0.0000	0.0300
8	Gentex HS24-110 Horn/Strobe	0.0000	0.1400
9	Gentex HS24-15 Horn/Strobe	0.0000	0.0770
10	Gentex HS24-15/75 Horn/Strobe	0.0000	0.0870
11	Gentex HS24-30 Horn/Strobe	0.0000	0.0870
12	Gentex HS24-60 Horn/Strobe	0.0000	0.1140
13	Gentex HS24-75 Horn/Strobe	0.0000	0.1160
14	Gentex SHG24-110 Horn/Strobe	0.0000	0.2500
15	Gentex SHG24-15/75-C Horn/Strobe	0.0000	0.1230
16	Gentex SHG24-15/75-W Horn/Strobe	0.0000	0.1230
17	Gentex SHG24-15/75-Z Horn/Strobe	0.0000	0.1230
18	Gentex SHG24-30 Horn/Strobe	0.0000	0.1230
19	Gentex SHG24-30/75 Horn/Strobe	0.0000	0.1720
20	Gentex SHG24-60 Horn/Strobe	0.0000	0.1450
21	Gentex ST24-110 Strobe	0.0000	0.1100
22	Gentex ST24-15 Strobe	0.0000	0.0470
23	Gentex ST24-15/75 Strobe	0.0000	0.0570
24	Gentex ST24-30 Strobe	0.0000	0.0570
25	Gentex ST24-60 Strobe	0.0000	0.0840
26	Gentex ST24-75 Strobe	0.0000	0.0860
27	Silent Knight end of line relay EOL-1224RLY	0.0150	0.0150
28	System Sensor H12/24 Horn	0.0000	0.0250
29	System Sensor P24110 Horn/Strobe	0.0000	0.1650
30	System Sensor P241575 Horn/Strobe	0.0000	0.0740
31	System Sensor P2430 Horn/Strobe	0.0000	0.0920
32	System Sensor P2475 Horn/Strobe	0.0000	0.1480
33	System Sensor S2415 Strobe	0.0000	0.0430
34	System Sensor S241575 Strobe	0.0000	0.0490
35	System Sensor S2430 Strobe	0.0000	0.0670
36	System Sensor S2475 Strobe	0.0000	0.1230
37	System Sensor SS24110 Strobe	0.0000	0.1400
38	Wheelock AMT-24-IS-VFR Strobe Horn	0.0000	0.0400
39	Wheelock AMT-24-LSM-VFR Strobe Horn	0.0000	0.1250
40	Wheelock AS-24110-HFR Strobe Horn	0.0000	0.2020
41	Wheelock AS-241575-VFR Strobe Horn	0.0000	0.1020
42	Wheelock AS-2415-VFR Strobe Horn	0.0000	0.0870
43	Wheelock AS-2430-VFR Strobe Horn	0.0000	0.1350
44	Wheelock AS-2475-VFR Strobe Horn	0.0000	0.1560

SILENT KNIGHT

Notification Appliance Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	Alarm
45	Wheelock MIZ-24-R Mini-Horn	0.0000	0.0120
46	Wheelock MIZ-24-W Mini-Horn	0.0000	0.0120
47	User Defined		
48	User Defined		
49	User Defined		
50	User Defined		
51	User Defined		
52	User Defined		
53	User Defined		
54	User Defined		
55	User Defined		
56	User Defined		
57	User Defined		
58	User Defined		
59	User Defined		
60	User Defined		
61	User Defined		
62	User Defined		
63	User Defined		
64	User Defined		
65	User Defined		
66	User Defined		
67	User Defined		
68	User Defined		
69	User Defined		
70	User Defined		
71	User Defined		
72	User Defined		
73	User Defined		
74	User Defined		
75	User Defined		
76	User Defined		
77	User Defined		
78	User Defined		
79	User Defined		
80	User Defined		
81	User Defined		
82	User Defined		
83	User Defined		
84	User Defined		
85	User Defined		
86	User Defined		
87	User Defined		
88	User Defined		

SILENT KNIGHT

Notification Appliance Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	Alarm
89	User Defined		
90	User Defined		
91	User Defined		
92	User Defined		
93	User Defined		
94	User Defined		
95	User Defined		
96	User Defined		
97	User Defined		
98	User Defined		
99	User Defined		
100	User Defined		
101	User Defined		
102	User Defined		
103	User Defined		
104	User Defined		
105	User Defined		
106	User Defined		
107	User Defined		
108	User Defined		
109	User Defined		
110	User Defined		
111	User Defined		
112	User Defined		
113	User Defined		
114	User Defined		
115	User Defined		
116	User Defined		
117	User Defined		
118	User Defined		
119	User Defined		
120	User Defined		
121	User Defined		
122	User Defined		
123	User Defined		
124	User Defined		
125	User Defined		
126	User Defined		
127	User Defined		
128	User Defined		
129	User Defined		
130	User Defined		
131	User Defined		
132	User Defined		

SILENT KNIGHT

Notification Appliance Database

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/25/14

Item#	Device / Description	Current Draw In Amperes Standby	Alarm
133	User Defined		
134	User Defined		
135	User Defined		
136	User Defined		
137	User Defined		
138	User Defined		
139	User Defined		
140	User Defined		
141	User Defined		
142	User Defined		
143	User Defined		
144	User Defined		
145	User Defined		
146	User Defined		
147	User Defined		
148	User Defined		
149	User Defined		
150	User Defined		