



PLAN NORTH
SIXTH FLOOR FIRE ALARM PLAN
 SCALE: 1/4"=1'-0"

NAC Circuit Voltage Drop Calculation 4/10/2013

Project Name: 111 COMMERCIAL STREET
 Circuit Number: FPS2-1
 Nominal System Voltage: 20.4 volts
 Minimum Device Voltage: 16 volts
 Distance from source to 1st device: 10
 Wire Gauge for balance of circuit: 14
 Max Output Current: 1.5 amps
 Total Circuit Current: 1.100 amps

Circuit is within limits					
Device	Device Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.079		20.33	0.07	0%
Device 2	0.066	12	20.26	0.14	1%
Device 3	0.066	20	20.14	0.26	1%
Device 4	0.107	32	19.97	0.43	2%
Device 5	0.107	2	19.96	0.44	2%
Device 6	0.079	27	19.84	0.56	3%
Device 7	0.079	16	19.79	0.61	3%
Device 8	0.079	22	19.72	0.68	3%
Device 9	0.079	14	19.68	0.72	4%
Device 10	0.079	12	19.65	0.75	4%
Device 11	0.107	13	19.63	0.77	4%
Device 12	0.066	26	19.60	0.80	4%
Device 13	0.107	55	19.57	0.83	4%
Totals	1.100	261			

NAC Circuit Voltage Drop Calculation 4/10/2013

Project Name: 111 COMMERCIAL STREET
 Circuit Number: FPS2-2
 Nominal System Voltage: 20.4 volts
 Minimum Device Voltage: 16 volts
 Distance from source to 1st device: 20
 Wire Gauge for balance of circuit: 14
 Max Output Current: 1.5 amps
 Total Circuit Current: 0.983 amps

Circuit is within limits					
Device	Device Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.079		20.28	0.12	1%
Device 2	0.066	11	20.22	0.18	1%
Device 3	0.066	9	20.17	0.23	1%
Device 4	0.079	16	20.10	0.30	1%
Device 5	0.079	29	19.97	0.43	2%
Device 6	0.107	39	19.83	0.57	3%
Device 7	0.107	7	19.80	0.60	3%
Device 8	0.107	38	19.71	0.69	3%
Device 9	0.079	16	19.68	0.72	4%
Device 10	0.107	2	19.68	0.72	4%
Device 11	0.107	25	19.66	0.74	4%
Totals	0.983	212			

NAC Circuit Voltage Drop Calculation 4/10/2013

Project Name: 111 COMMERCIAL STREET
 Circuit Number: FPS2-3
 Nominal System Voltage: 20.4 volts
 Minimum Device Voltage: 16 volts
 Distance from source to 1st device: 45
 Wire Gauge for balance of circuit: 14
 Max Output Current: 1.5 amps
 Total Circuit Current: 0.604 amps

Circuit is within limits					
Device	Device Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.066		20.23	0.17	1%
Device 2	0.079	9	20.20	0.20	1%
Device 3	0.176	7	20.18	0.22	1%
Device 4	0.107	29	20.13	0.27	1%
Device 5	0.176	10	20.12	0.28	1%
Totals	0.604	100			

REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	4/11/2013
1	SCALE NOTED REVISED	6/20/2013

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SIXTH FLOOR FIRE ALARM PLAN

DRAWN	JPB UNICAD JOB #13155
CHECKED	WAYNE B. HAWS NICET N 90496
DATE	4/8/2013
REVISION	1
SCALE	1/4"=1'-0"

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