

SEABREEZE

250 RIVERSIDE INDUSTRIAL PARKWAY
PORTLAND, ME



Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions
03/02/2020

PROJECT INFORMATION

- THIS SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- ALL DEVICES AND APPLIANCES SHALL BE LOCATED AND MOUNTED SO THAT ACCIDENTAL OPERATION OR FAILURE IS NOT CAUSED BY VIBRATION OR JARRING.
- EQUIPMENT SHALL BE INSTALLED IN LOCATIONS WHERE CONDITIONS DO NOT EXCEED THE VOLTAGE, TEMPERATURE, AND HUMIDITY LIMITS SPECIFIED IN THE MANUFACTURER'S PUBLISHED INSTRUCTIONS.
- THE SECONDARY POWER SUPPLY SHALL AUTOMATICALLY PROVIDE POWER TO THE PROTECTED PREMISES SYSTEM WITHIN 10 SECONDS WHENEVER THE PRIMARY POWER SUPPLY FAILS TO PROVIDE THE MINIMUM VOLTAGE REQUIRED FOR PROPER OPERATION.
- INITIATING DEVICES OF THE MANUAL OR AUTOMATIC TYPE SHALL BE SELECTED AND INSTALLED SO AS TO MINIMIZE NUISANCE AND UNINTENTIONAL ALARMS.
- ALL FIRE ALARM DEVICES SHALL COMPLY FULLY WITH ALL A.D.A. REQUIREMENTS.
- REQUIRED SIGNALS SHALL NOT BE LOST, INTERRUPTED, OR DELAYED BY MORE THAN 10 SECONDS AS A RESULT OF THE PRIMARY POWER FAILURE.

INSTALLATION TYPE	
<input checked="" type="checkbox"/> NEW INSTALL	<input type="checkbox"/> TENANT IMPROVEMENT
WIRING STYLE	
<input type="checkbox"/> CLASS "A"	<input checked="" type="checkbox"/> CLASS "B"
PANEL TYPE	
<input type="checkbox"/> CONVENTIONAL	<input checked="" type="checkbox"/> ADDRESSABLE
BLDG OCCUPANCY	
GROUP B	<input checked="" type="checkbox"/> SPRINKLED
AREA - SQUARE FOOT	
11,220 SF	
SCOPE OF WORK	
INSTALL A NEW FIRE ALARM SYSTEM.	

DEVICE LEGEND

QTY	SYMBOL	DESCRIPTION	PART NUMBER
1	[FACP]	FIRE ALARM CONTROL PANEL	SK-6700
1	[S]	PHOTOELECTRIC SMOKE DETECTOR	SK-PHOTO
1	[M]	MANUAL PULL STATION	SK-PULL-SA
1	[DM]	DUAL MONITOR MODULE	SK-MONITOR-2
1	[SV]	SUPERVISORY CONTROL VALVE	BY OTHERS
1	[WF]	WATER FLOW SWITCH	BY OTHERS
1	[KB]	KNOX BOX	BY OTHERS
1	[W]	WALL MOUNTED HORN/STROBE	P2RL
1	[WV]	WALL MOUNTED HORN/STROBE WEATHERPROOF	P2RK

FIRE ALARM WIRE LEGEND

TAG	DESCRIPTION	TYPE	GAUGE	PFL	FPLR	FPLP	THHN	TFRN
A	ADDRESSABLE SLC LOOP	UTP SOLID	18 AWG	X	X	X		
N	NOTIFICATION DEVICES	2 COND. SOLID	14 AWG	X	X	X		

NOTE:
ALL WIRE/CABLES ARE FOR INDOOR INSTALLATIONS. UNDERGROUND CABLE / WIRE MUST BE LISTED FOR INSTALLATION IN WET CONDITION.

PLENUM CABLE VS NON-PLENUM

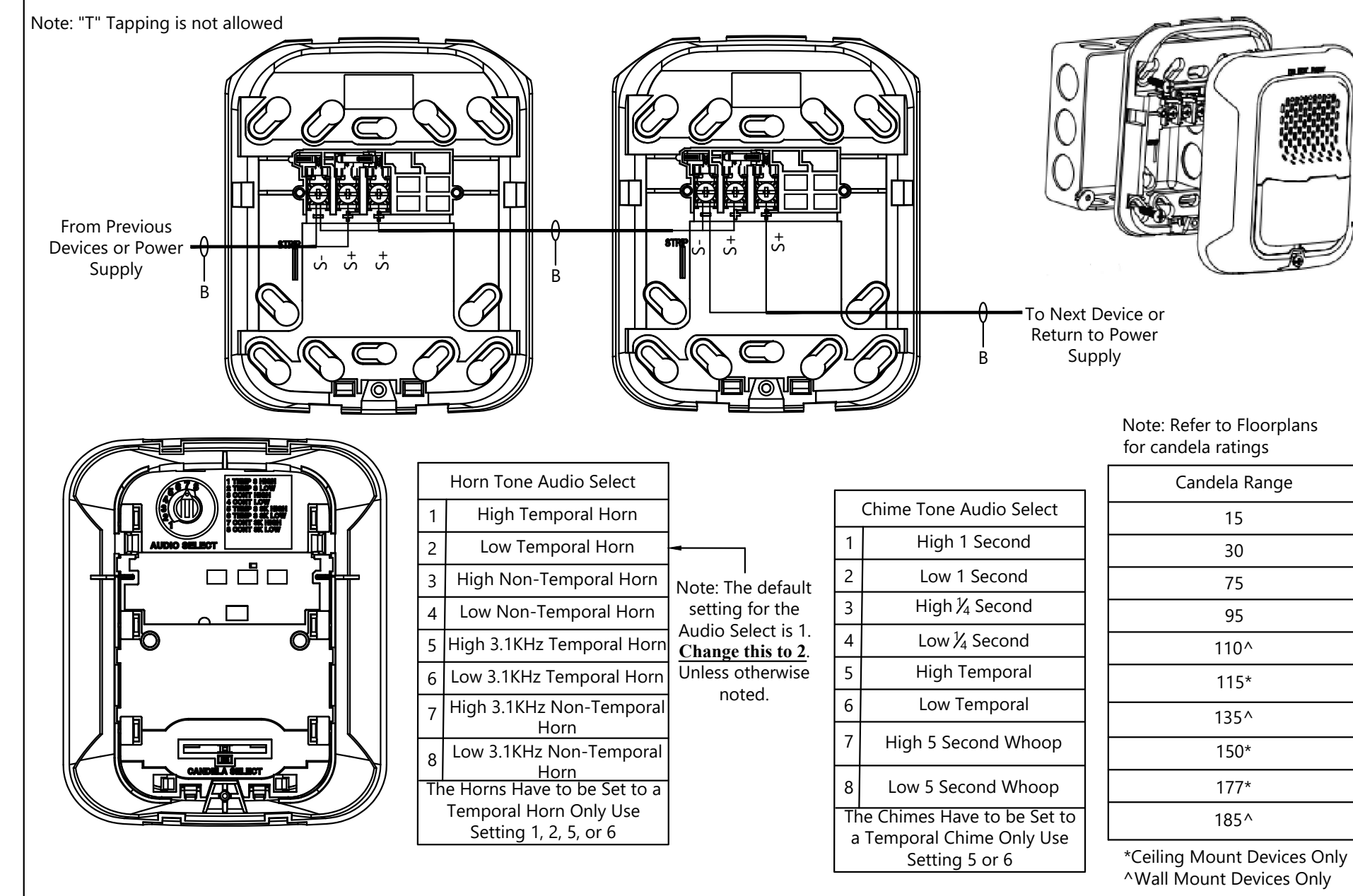
PFL - THIS IS GENERAL USE POWER LIMITED FIRE ALARM CABLE. IT CANNOT BE USED IN A PLENUM SPACE OR FOR RISER (CABLING BETWEEN FLOORS). CABLE MUST BE IN CONDUIT.
PFLR - THIS IS POWER LIMITED RISER RATED CABLE THAT CAN BE USED FOR GENERAL PURPOSES OR BETWEEN FLOORS. IT CANNOT BE USED IN A PLENUM SPACE. CABLE MUST BE IN CONDUIT.
FPLP - THIS IS A POWER LIMITED CABLE THAT CAN BE USED IN A PLENUM, RISER OR FOR GENERAL PURPOSE.

CONDUIT SIZE	MAX CONDUCTOR AREA	CONDUIT SIZE	MAX CONDUCTOR AREA
1/2"	0.12 SQ. INCH**	1-1/4"	0.60 SQ. INCH*
3/4"	0.21 SQ. INCH*	1-1/2"	0.82 SQ. INCH*
1"	0.34 SQ. INCH*	2"	1.34 SQ. INCH*

*40% CONDUIT FILL PER N.E.C.
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ITEMS SUCH AS CAPACITANCE BETWEEN CONDUCTORS AND WIRE GAUGE CAN BE CRUCIAL TO THE CIRCUIT DESIGN OF THIS SYSTEM INSTALLATION. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR SELECTING AND INSTALLING CABLE MANUFACTURER AND MODEL THAT MEETS OR EXCEEDS THE REQUIREMENTS.

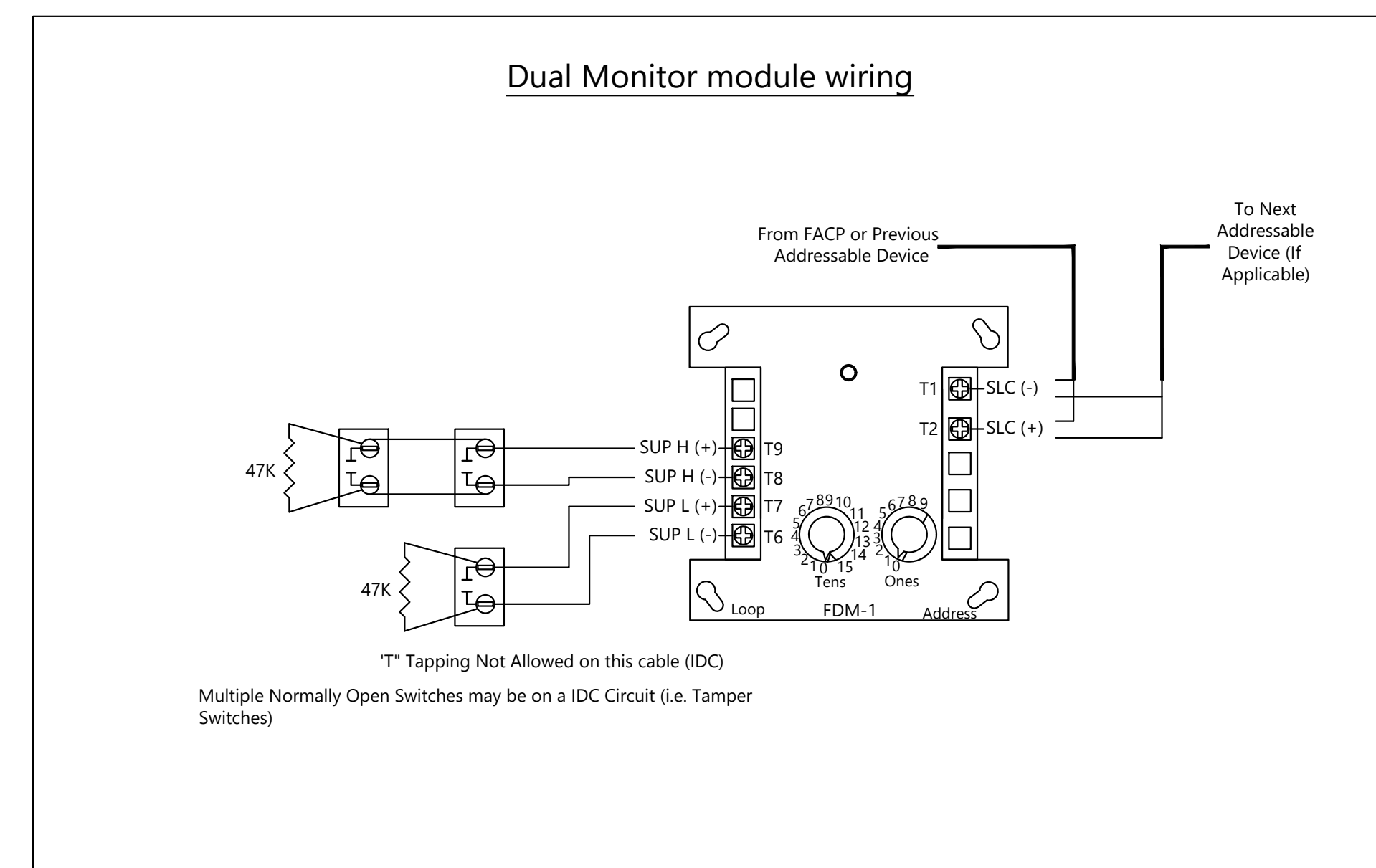
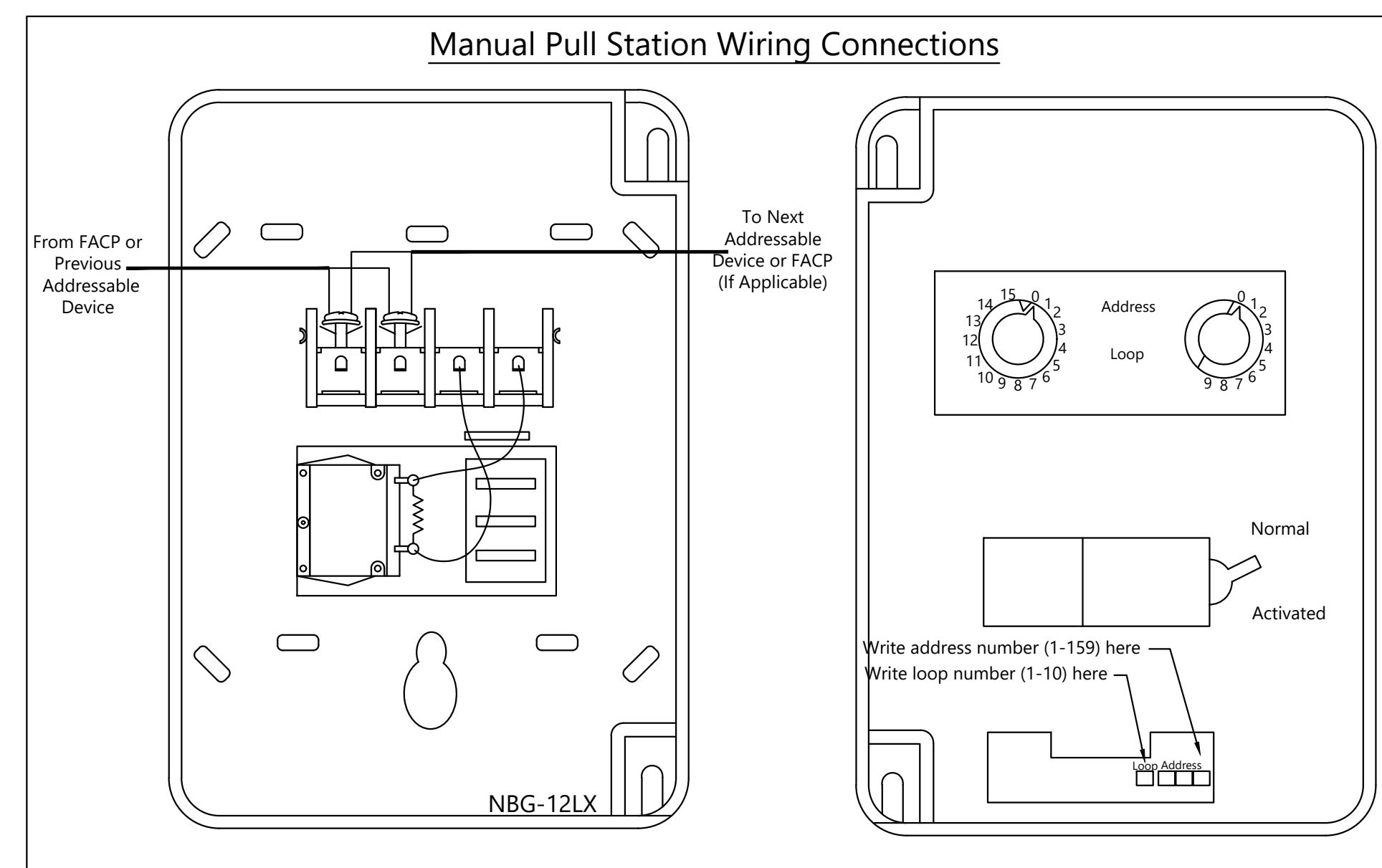
Connection Drawing for System Sensor Horn, Chime, Horn/Strobe, Chime/Strobe, and Strobe



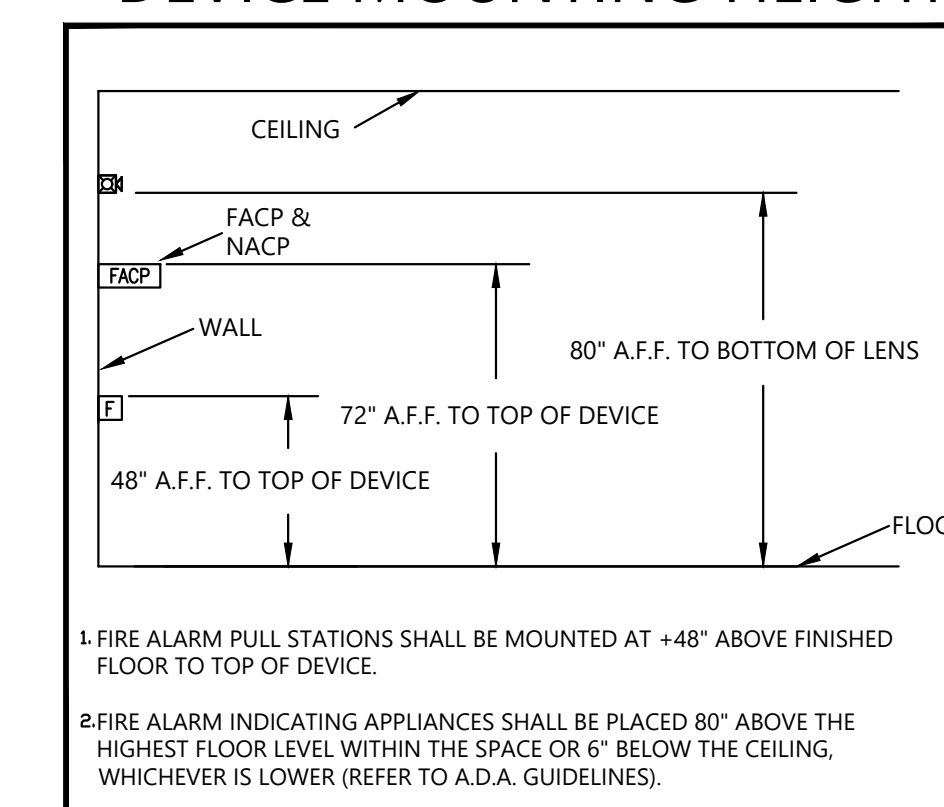
OUTPUTS

OUTPUT	INDICATOR	INPUTS
INDICATE ALARM AND LOCATION AT FACP AND FACP	SMOKE DETECTOR IN ALARM	SMOKE DETECTOR IN ALARM
SEND ALARM SIGNAL TO CENTRAL STATION MONITORING	SPRINKLER WATERFLOW	SPRINKLER WATERFLOW
SEND ALARM SIGNAL TO CENTRAL STATION MONITORING	SPRINKLER TAMPER SWITCH	SPRINKLER TAMPER SWITCH
SEND ALARM SIGNAL TO CENTRAL STATION MONITORING	MANUAL PULL STATION	MANUAL PULL STATION
SEND WATERFLOW SIGNAL TO CENTRAL STATION MONITORING	TROUBLE	TROUBLE
ILLUMINATE LED ON DETECTOR	BATTERY FAULT	BATTERY FAULT
RELEASE DOOR LATCHES	GROUND FAULT	GROUND FAULT
CLOSE FIRE DAMPERS	OPEN CIRCUIT	OPEN CIRCUIT
SOUND LOCAL HORN AT DETECTOR BASE	LOSS OF PRIMARY POWER	LOSS OF PRIMARY POWER
	LOSS OF COMMUNICATION	LOSS OF COMMUNICATION

SEQUENCE OF OPERATION



DEVICE MOUNTING HEIGHT



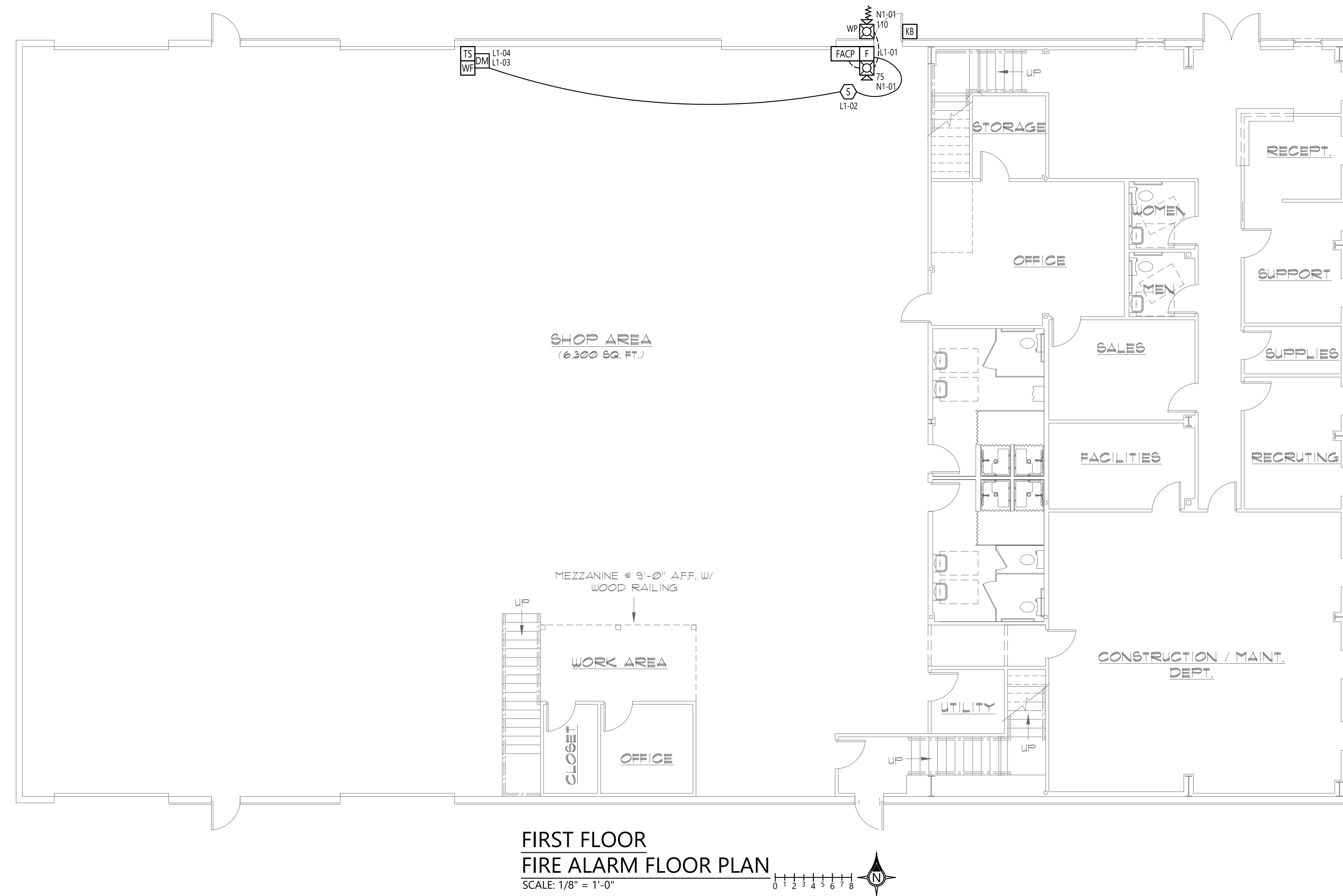
#	DATE	DESCRIPTION

John Wocher, SET
Chief Designer - Fire Alarm
Professional ID: 13719
Expires: 1/1/2023

GUNNINGHAM SECURITY SYSTEMS
10 PRINCES POINT ROAD
YARMOUTH, MAINE 04096
207-846-6080

FIRE ALARM SYSTEM PLAN
SEABREEZE
250 RIVERSIDE INDUSTRIAL PARKWAY
PORTLAND, ME

SCALE:	AS NOTED
DATE:	02/19/2020
DRAWN:	JM
SHEET:	1 OF 2



DEVICE LEGEND

QTY	SYMBOL	DESCRIPTION	PART NUMBER
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1	FP	MANUAL PULL STATION	SK-PULL-SA
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1	TS	SUPERVISORY CONTROL VALVE	BY OTHERS
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GUNNINGHAM SECURITY SYSTEMS
10 PRINCES POINT ROAD
YARMOUTH, MAINE 04096
207-846-6080

John Mochter, SET
Title: Designer - Fire Alarm
Registration No. 13729
Expires: 1/1/2023

Circuit Number	N1
Nominal System Voltage	20.4
Minimum Device Voltage	16
Total Circuit Current	0.333
Wire Gauge	14
Chmts Per 1000	3.07

Device Number	Device Current	Distance from previous device	At Device Voltage	Drop from source	Percent Drop
START	0.000	0	20.40	0.000	0.00%
N1-01	0.121		20.40	0.000	0.00%
N1-02	0.212		20.40	0.000	0.00%
END	0.333		20.40	0.000	0.00%
Totals	0.333	0	End of Line Voltage	20.40	

Honeywell IntelliKnight 6700 Battery Calculation

Secondary Power Source Requirements

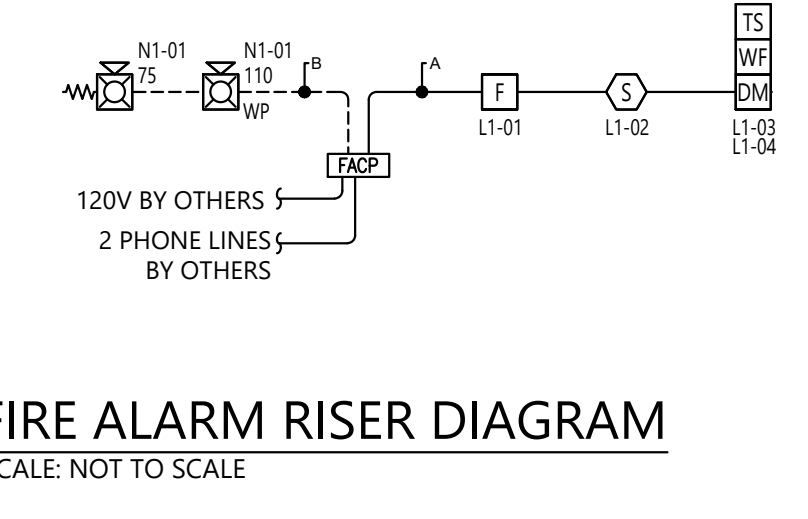
Device Type	Qty	Standby Current (amps)	Total	Secondary Alarm Current (amps)	Total
1. Control Panel					
6700 Control Panel	1	0.165000	= 0.165000	1	0.310000 = 0.310000
2. Addressable SLC Devices					
SK-PHOTO (-T)	1	0.000300	= 0.000300	1	0.000300 = 0.000300
SK-PULL-SA	1	0.000375	= 0.000375	1	0.000375 = 0.000375
SK-MONITOR-2	1	0.000750	= 0.000750	1	0.000750 = 0.000750
3. SLC Accessory Bases					
B200S	1	0.000300	= 0.000300	1	0.000300 = 0.000300
4. SLC Isolator Devices					
SK-ISO	1	0.000450	= 0.000450	1	0.000450 = 0.000450
ISO-6	1	0.002700	= 0.002700	1	0.002700 = 0.002700
B224BI	1	0.000500	= 0.000500	1	0.000500 = 0.000500
5. Auxiliary Power Draw - SLC Devices					
SK-CONTROL (Aux. Power)	1	0.001700	= 0.001700	1	0.001700 = 0.001700
6. Accessory Modules					
5850	1	0.020000	= 0.020000	1	0.020000 = 0.020000
5824	1	0.045000	= 0.045000	1	0.045000 = 0.045000
SK-FFT	1	0.120000	= 0.120000	1	0.230000 = 0.230000
7. Miscellaneous Devices					
Conventional Detectors	1	0.000000	= 0.000000	1	0.000000 = 0.000000
8. Notification Appliance Circuits					
NAC 1	1	0.000000	= 0.000000	1	0.333000 = 0.333000
NAC 2	1	0.000000	= 0.000000	1	0.000000 = 0.000000
Total Standby Load		0.166425		Total Alarm Load	0.644425

Honeywell IntelliKnight 6700 Battery Calculation

Note 1: You are fully responsible for verifying these calculations.
Note 2: Use the dropdowns in the yellow cells to enter values.

Calculation in Total Sheet

Required Standby Time in Hours	Required Alarm Time in Minutes
24 Hours	5 Minutes
Standby Load Current: 0.16643 Amps	Alarm Load Current (Amps): 0.64443 Amps
	Total Current Load: 4.048 AH
	Multiply by the Derating Factor: 1.2
	Total Ampere Hours Required: 4.86 AH
Recommended Batteries: BAT-1270 - 7AH Batteries	



FIRE ALARM RISER DIAGRAM
SCALE: NOT TO SCALE



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