

BUILDING INFORMATION	
BUILDING OCCUPANCY :	A2, M, B
SPRINKLERED :	FULLY SPRINKLERED
BUILDING TYPE :	VB
NUMBER OF STORIES :	1 STOREY BUILDING
BUILDING APPROXIMATE AREA :	5,103 SQ. FT.

# FIRE ALARM SYSTEM EAST TOWN CROSSING HOTWORX STUDIO

727 SHAW ROAD E,  
PUYALLUP, WA 98372

CIRCUIT & WIRE LEGEND				
ID	TYPE OF CKT	WIRING CLASS	CIRCUIT DESCRIPTION	MINIMUM SIZE AND TYPE OF WIRE
A	SLC	B	SIGNALING LINE CIRCUIT	16/2 AWG SOLID TYPE FPLP NONSHLD
V	NAC	B	NOTIFICATION APPLICATION CIRCUIT	14/2 AWG SOLID TYPE FPLP NONSHLD
C	COMM	B	COMMUNICATION CIRCUIT	18/2 AWG SOLID TYPE FPLP NONSHLD

- ### GENERAL NOTES
- ALL FIRE ALARM DEVICES MUST BE U.L. LISTED.
  - ALL WIRING SHALL BE IN ACCORDANCE WITH N.E.C. AND AUTHORITIES HAVING JURISDICTION.
  - ACCESS PANELS NECESSARY TO ACCESS FIRE ALARM EQUIPMENT FOR MAINTENANCE, TESTING AND REPAIR IS EXCLUDED. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO INITIATING DEVICES THAT REQUIRE SERVICING, TROUBLE SHOOTING AND MAINTENANCE.
  - 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
  - ALL DEVICES BACKBOXES, TERMINAL CABINETS, GUTTERS, JUNCTION BOXES AND ASSOCIATED CONDUITS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACKBOXES SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
  - ELECTRICAL POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT(S). THE CIRCUIT(S) AND CONNECTIONS SHALL BE MECHANICALLY PROTECTED (CIRCUIT BREAKERS SHALL BE LOCKED IN THE ON POSITION WITH AN APPROVED MECHANICAL CLIP). CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING. SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL AND SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT. (NFPA 72, 2019).
  - ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES.
  - POINT AND COMMON ANNUNCIATION AND T-TAPPING ARE PROHIBITED (T-TAPPING IS ALLOWABLE ON ADDRESSABLE CLASS B SLC LOOPS ONLY).
  - ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
  - ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION. THE FIRE ALARM CONTROL UNIT TO SUPERVISE THE ANNUNCIATOR PANEL, ALL INITIATING AND INDICATING DEVICE CIRCUITS.
  - UPON COMPLETION OF ALL INSTALLATION AND TESTING, THE CONTRACTOR SHALL PROVIDE TO THE AUTHORITY HAVING JURISDICTION AND THE BUILDING OWNER A COMPLETED AND SIGNED NFPA 72, 2019 CERTIFICATE OF COMPLETION AND AS-BUILT PLANS (RECORD DRAWING).
  - AREAS HAVING MORE THAN 2 STROBES IN THE FIELD OF VIEW SHALL BE SYNCHRONIZED PER NFPA 72, 2019.

### SCOPE OF WORK

THIS IS AN INSTALLATION OF A NEW FIRE ALARM SYSTEM. A NEW CELLULAR COMMUNICATOR WILL BE ADDED TO TRANSMIT FIRE ALARM SIGNAL TO THE CENTRAL STATION.

### SHEET INDEX

SHEET NO.	SHEET DESCRIPTION
FA0.01	GENERAL INFORMATION & SEQUENCE OF OPERATION
FA1.01	FLOOR AND ROOF PLANS, RISER DIAGRAM
FA3.01	CALCULATIONS AND DEVICES DETAILS
FA4.01	DEVICE DETAILS

### SYMBOL LEGEND & MATERIAL LIST

TOTAL	QUANTITY			SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
	NEW	RPLCED	EXSTNG				
1	1	---	---	[FACP]	FIRE ALARM CONTROL PANEL 12V, 8AH BATTERY	POTTER ELK	IPA-4000 BT-80
1	1	---	---	[GSM]	FIRE ALARM CELLULAR COMMUNICATOR 12V 8AH BATTERY	NAPCO ELK	SLE-MAX-CFBPS BT-80
1	1	---	---	[DOC]	DOCUMENT CABINET	SPACE AGE	SSU00685
10	10	---	---	[S]	SMOKE DETECTOR 6" DETECTOR BASE	POTTER POTTER	PAD300-PD PAD300-6DB
4	4	---	---	[D]	DUCT SMOKE DETECTOR	POTTER	PAD300-DUCT
4	4	---	---	[RTS]	REMOTE TEST SWITCH	SYSTEM SENSOR	RTS-151
3	3	---	---	[F]	MANUAL PULL STATION	POTTER	PAD100-PSSA
3	3	---	---	[M]	MONITOR MODULE	POTTER	PAD100-SIM
6	6	---	---	[C]	CONTROL RELAY MODULE	POTTER	PAD100-RM
4	4	---	---	[C] WP	HORN/STROBE - CEILING MOUNT WP = WEATHERPROOF	POTTER	PE-3RHS-FW
1	1	---	---	[C] WP	HORN/STROBE - WALL MOUNT WP = WEATHERPROOF	POTTER	PE-3RHS-FW
1	1	---	---	[C]	HORN/STROBE - WALL MOUNT	POTTER	PE-HSW
1	1	---	---	[S]	STROBE - WALL MOUNT	POTTER	PE-STW
1	1	---	---	[S]	STROBE - CEILING MOUNT	POTTER	PE-STWC
2	2	---	---	[S] WP	STROBE - CEILING MOUNT WP = WEATHERPROOF	POTTER	PE-RST-FW
1	1	---	---	[S] WP	STROBE - WALL MOUNT WP = WEATHERPROOF	POTTER	PE-RST-FW

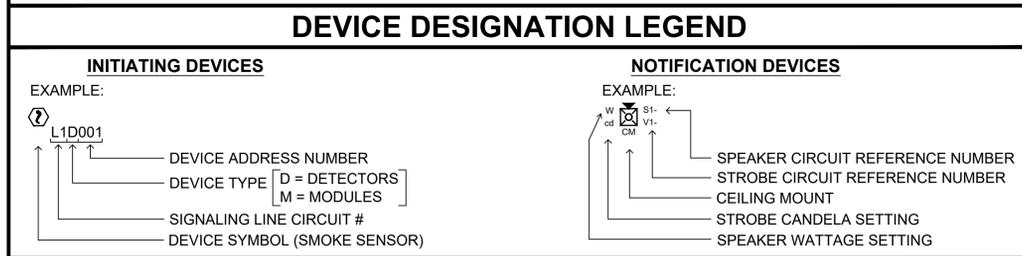
### SEQUENCE OF OPERATION

SYSTEM INPUTS	CONTROL UNIT ANNUNCIATION								NOTIFICATION							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1 MANUAL PULL STATION																
2 SMOKE DETECTOR ABOVE THE FACP																
3 DUCT DETECTOR																
4 AREA SMOKE DETECTOR																
5 WATER FLOW																
6 TAMPER SWITCH																
7 FIRE ALARM AC POWER FAILURE																
8 FIRE ALARM SYSTEM LOW BATTERY																
9 GENERAL TROUBLE - FIRE ALARM WIRE (CLASS B)																
10 OPEN CIRCUIT																
11 GROUND FAULT																
12 WIRE-TO-WIRE SHORT																
13 CELLULAR COMMUNICATOR TROUBLE																

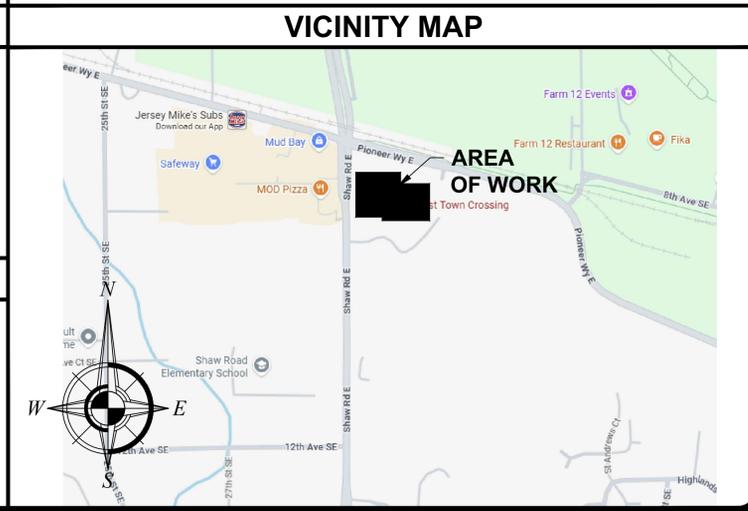
### REFERENCED CODES

2021 INTERNATIONAL BUILDING CODE AS ADOPTED/EIBC 2021  
 2021 INTERNATIONAL MECHANICAL CODE AS ADOPTED  
 2021 INTERNATIONAL FIRE CODE AS ADOPTED  
 UPC 2021  
 NFPA 72 2019  
 NFPA 13 2019  
 NFPA 70 2020  
 ANSI A117.1

SYSTEM INPUTS	CONTROL UNIT ANNUNCIATION								NOTIFICATION							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1 MANUAL PULL STATION																
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FIRE ALARM SERVICE COMPANY	MONITORING COMPANY
INSTALLATION COMPANY <b>MAX POWER ELECTRIC</b> 5009 PACIFIC HWY E, SUITE 13 FIFE, WA 98424  LICENSE# MAXPOPE815M9 E-MAIL: service@maxpowermw.com CONTACT NO.: (253) 838-4400	<b>NORTHWEST ALARM MONITORING LLC</b> 1743 1ST AVE STE 201, SEATTLE, WA 98134  PHONE NO.: 877-870-0910



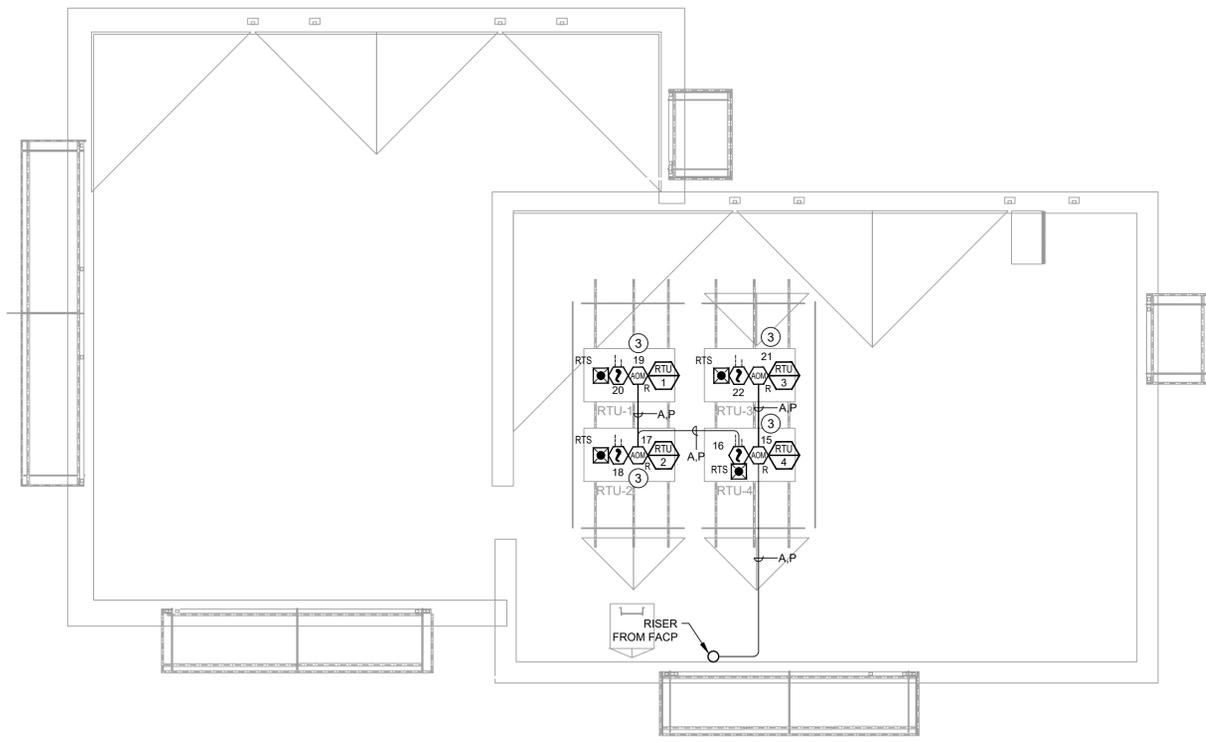
License# MAXPOPE815M9  
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Jeremy Locken, ET  
  
 NICET Level III Fire Alarm  
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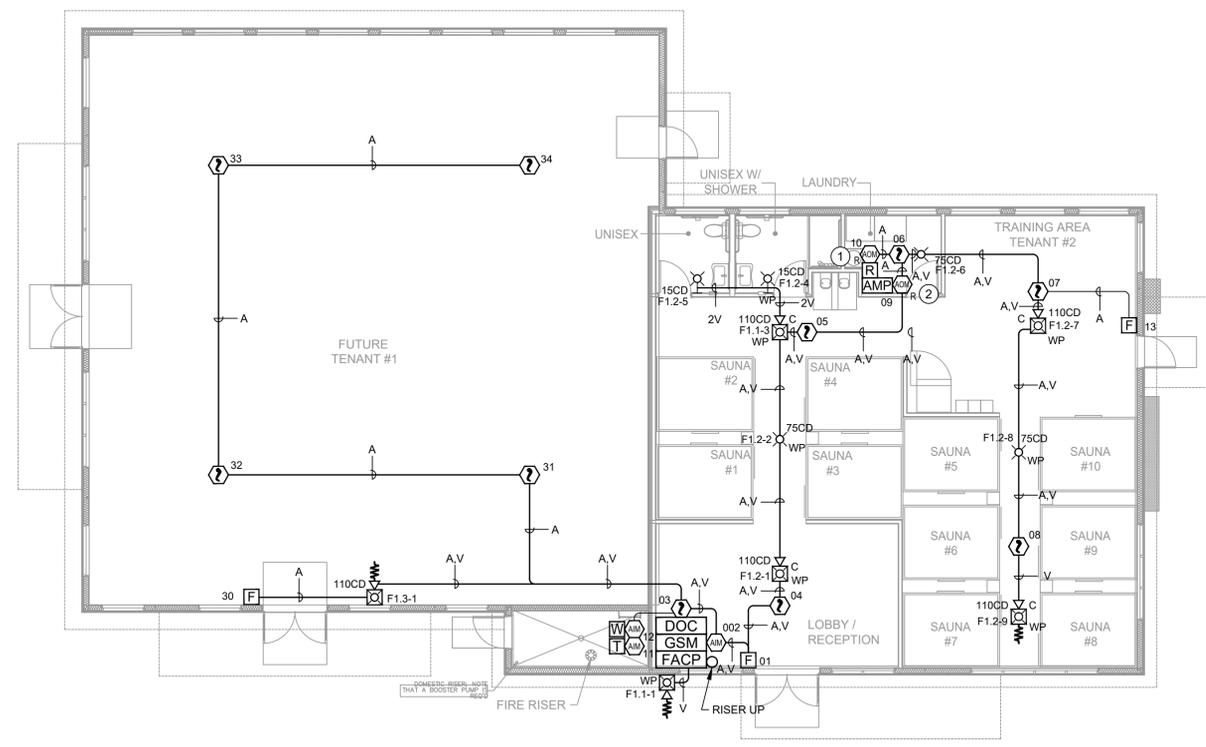
REV	DESCRIPTION	DATE	BY
0	PLAN CHECK	12/12/2025	LSDS

**EAST TOWN CROSSING  
HOTWORX STUDIO  
FIRE ALARM SYSTEM**  
 727 SHAW ROAD E,  
PUYALLUP, WA 98372

DRAWN / DESIGN BY  
  
 CHECKED BY  
 JL  
 DATE  
 12/12/2025  
 PROJECT NAME  
 EAST TOWN CROSSING  
 PROJECT #  
 12092025  
 SHEET DETAIL  
 GENERAL INFORMATION  
 AND SEQUENCE  
 OF OPERATION  
 SHEET NUMBER  
**FA0.01**



**BUILDING ROOF PLAN**  
 SCALE: 1/8" = 1'-0"  
 (IN FEET)



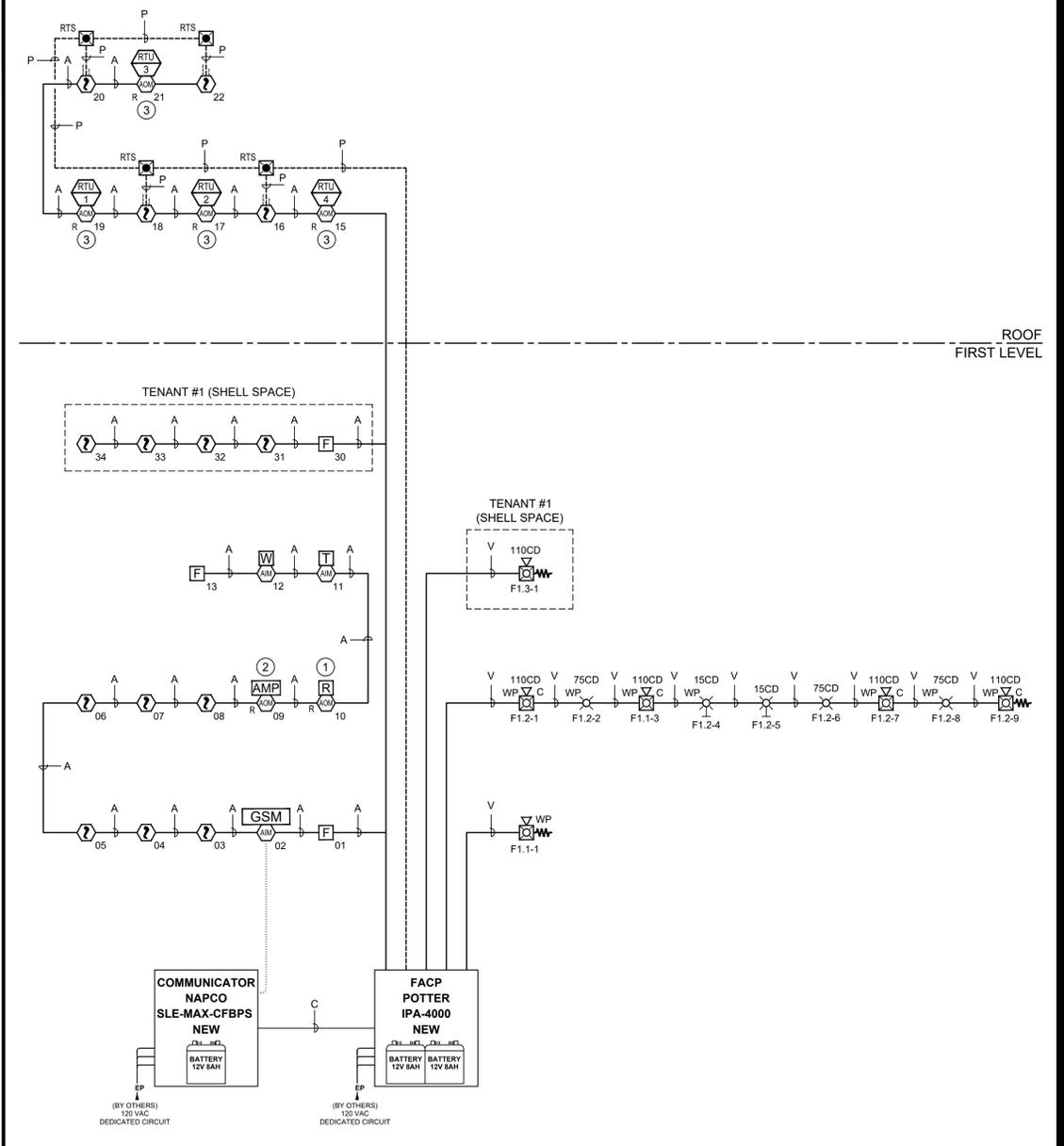
**BUILDING FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"  
 (IN FEET)

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
[FACP]	FIRE ALARM CONTROL PANEL
[GSM]	CELLULAR COMMUNICATOR
[DOC]	DOCUMENT CABINET
[?]	SMOKE DETECTOR
[?]	DUCT SMOKE DETECTOR
[RTS]	REMOTE TEST SWITCH
[?]	HEAT DETECTOR
[F]	MANUAL PULL STATION
[MM]	MONITOR MODULE
[RM]	RELAY MODULE
[C]	HORN/STROBE - CEILING MOUNT WP = WEATHERPROOF
[WP]	HORN/STROBE - WALL MOUNT WP = WEATHERPROOF
[X]	HORN/STROBE - WALL MOUNT
[X]	STROBE - WALL MOUNT
[X]	STROBE - WALL MOUNT WP = WEATHERPROOF
[X]	STROBE - CEILING MOUNT
[X]	STROBE - CEILING MOUNT WP = WEATHERPROOF
[AMP]	SOUND SYSTEM RECIEVER - F.B.O.
[R]	ROCKBOT - F.B.O.
[RTU #]	ROOF TOP UNIT - F.B.O.
F.B.O.	FURNISHED BY OTHERS

WIRE TAG DESIGNATION		
ID	TYPE OF CIRCUIT	CIRCUIT DESCRIPTION
A	SLC	SIGNALING LINE CIRCUIT 16/2 AWG - SOLID - NONSHEILDLED
V	NAC	NOTIFICATION APPLIANCE CIRCUIT 14/2 AWG - SOLID - NONSHEILDLED
C	COMM	COMMUNICATION CIRCUIT 18/2 AWG - SOLID - NONSHEILDLED
P	24VDC	POWER CIRCUIT 14/2 AWG - SOLID - NONSHEILDLED

- KEY NOTES**
- ① FA RELAY - TO OVERRIDE ACCESS CONTROL PANEL
  - ② FA RELAY - TO SHUTDOWN SOUND SYSTEM
  - ③ FA RELAY - TO SHUTDOWN RTU UNIT

**RISER DIAGRAM**



**MAX POWER FIRE SYSTEMS**  
 License# MAXPOPE815M9  
 5009 Pacific HWY E, Suite 13, Puyallup, WA 98424  
 E-mail: service@maxpowerfire.com Contact #: (253) 838-4400

Jeremy Locken, ET  
 J. Locken  
 NICET Level III Fire Alarm  
 Certification #: 95603  
 Expires 07/2027

REV	DESCRIPTION	DATE	BY
0	PLAN CHECK	12/12/2025	LSDS

**EAST TOWN CROSSING  
 HOTWORX STUDIO  
 FIRE ALARM SYSTEM**  
 727 SHAW ROAD E,  
 PUYALLUP, WA 98372

DRAWN / DESIGN BY  
**LSDS**  
 CHECKED BY  
 JL  
 DATE  
 12/12/2025  
 PROJECT NAME  
 EAST TOWN CROSSING  
 PROJECT #  
 12092025  
 SHEET DETAIL  
 FLOOR AND ROOF PLANS  
 SHEET NUMBER  
**FA1.01**

# FACP BATTERY AND VOLTAGE DROP CALCULATIONS



Project Name: EAST TOWN CROSSING  
 Standby Hours: 24  
 Alarm Mins: 5  
 Efficiency Factor: 20%  
 SLC Type: Class B  
 NAC Source Voltage: 20.4

Model #: IPA-4000  
 Max Panel Current (amps): 10  
 User assumes all responsibility to ensure the quantities and current draw values in this worksheet are accurate prior to submit.

Qty	Addressable Fire Alarm Part #	Description	Standby (amps) Each	Total	Alarm (amps) Each	Total
1	IPA-4000	Analog Addressable FACP	0.130	0.130	0.220	0.220
			Panel Standby:	0.130	Panel Alarm:	0.220

SLC Devices		Standby	Alarm
AFC / ARC / IPA Series - PAD100/200			
3	PAD100-PSSA/PSDA	0.000200	0.000200
3	PAD100-SIM	0.000240	0.000240
6	PAD100-RM	0.000240	0.000240
10	PAD300-PD	0.000300	0.000300
4	PAD300-DUCT	0.000300	0.000300
* Requires Aux Power (Configure Below)		SLC Standby:	SLC Alarm:
		0.006960	0.042960

See the installation manual for special considerations when installing IM, IB, AIB, SCL devices on Class B loops.  
 \*\*\* Requires Aux Sounder Base Power (Configure Below)

NAC Circuits (See NAC Configuration below)		Standby (amps) Total	Alarm (amps) Total
1	Notification C1 - NEAR ENTRANCE	0.00000	0.10500
2	Notification C2 - Tenant #2	0.00000	0.86300
3	Notification C3 - Tenant #1 (Shell Space)	0.00000	0.10900
		NAC Standby:	NAC Alarm:
		0.00000	1.07700

I/O Circuits (See I/O Configuration below)		Standby (amps) Total	Alarm (amps) Total
1	Aux Power C1-ROOF	0.04800	0.04800
		I/O Standby:	I/O Alarm:
		0.04800	0.04800

Battery Calculation Summary		Standby (amps)	Alarm (amps)
		Panel Current:	0.22000
		P-Link Current:	0.00000
		SLC Device Current:	0.04296
		NAC Circuit Current:	1.07700
		I/O Circuit Current:	0.04800
		Total Standby:	1.34796
		Total Alarm:	1.34796
		Standby Hours:	24
		Alarm Mins:	5
		AH Required:	0.12
		Total Combined Standby & Alarm AmperHours Required:	4.56
		Efficiency Factor:	20%
		Required Battery AmperHours:	5.47
		Battery AmperHours Provided:	8AH

Note: The cabinet will house two 8 AH or 18 AH batteries. The charging circuit is rated for up to two 55 AH batteries.

NAC Circuit Configuration & Voltage Drop EAST TOWN CROSSING 12/12/2025

NAC 1	Usage: Notification	Description: C1 - NEAR ENTRANCE	MAX Circuit Current (amps): 3	Source Voltage Used (VDQ): 20.4		
Wire Type	Ohms/1000ft	Length 1-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	20	0.128	0.105	20.39	16

Qty	Lookup Type	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
1	Weatherproof Horn Strobe - Wall	PE-3RHS-FW 75cd	0.000000	0.000000	0.105000	0.105000
			Total Standby:	0.00000	Total Alarm:	0.10500

NAC2	Usage: Notification	Description: C2 - Tenant #2	MAX Circuit Current (amps): 3	Source Voltage Used (VDQ): 20.4		
Wire Type	Ohms/1000ft	Length 1-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	200	1.276	0.863	19.30	16

Qty	Lookup Type	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
4	Weatherproof Horn Strobe - Ceiling	PE-3RHS-FW 110cd	0.000000	0.000000	0.127000	0.508000
2	Weatherproof Strobe - Ceiling	PE-RST-FW 75cd	0.000000	0.000000	0.105000	0.210000
1	Weatherproof Strobe - Wall	PE-RST-FW 15cd	0.000000	0.000000	0.063000	0.063000
1	Strobe - Ceiling	PE-STWC 75cd	0.000000	0.000000	0.060000	0.060000
1	Strobe - Wall	PE-STW 15cd	0.000000	0.000000	0.022000	0.022000
			Total Standby:	0.00000	Total Alarm:	0.86300

NAC3	Usage: Notification	Description: C3 - Tenant #1 (Shell Space)	MAX Circuit Current (amps): 3	Source Voltage Used (VDQ): 20.4		
Wire Type	Ohms/1000ft	Length 1-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	50	0.319	0.109	20.37	16

Qty	Lookup Type	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
1	Horn Strobe - Wall	PE-HSW 110cd	0.000000	0.000000	0.109000	0.109000
			Total Standby:	0.00000	Total Alarm:	0.10900

I/O Circuit Configuration & Voltage Drop EAST TOWN CROSSING 12/12/2025

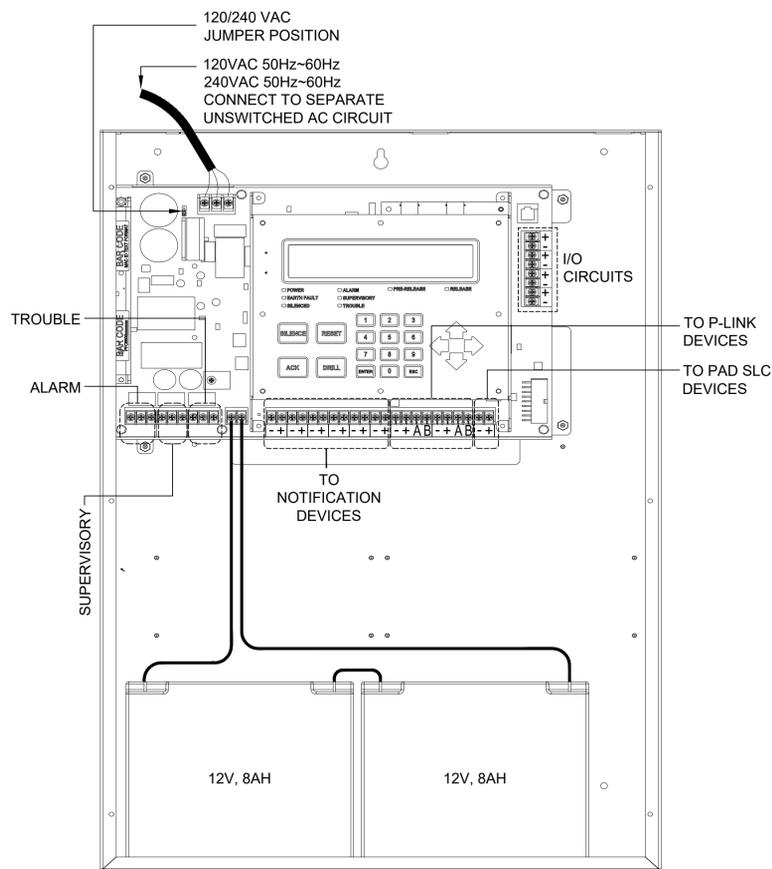
I/O 1	Usage: Aux Power	Description: C1-ROOF	MAX Circuit Current (amps): 1	Source Voltage Used (VDQ): 20.4		
Wire Type	Ohms/1000ft	Length 1-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	0.000	0.000	0.048	20.40	16

Qty	Lookup Type	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
4	Remote Test Switch	RTS-151	0.012000	0.048000	0.012000	0.048000
			Total Standby:	0.04800	Total Alarm:	0.04800

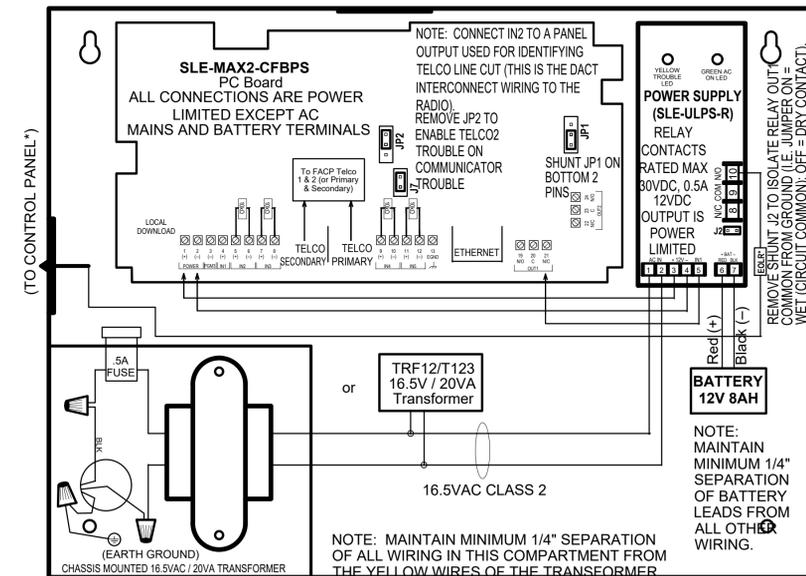
# FIRE ALARM CELLULAR COMMUNICATOR BATTERY CALCULATION

StarLink SLE-MAX2-CFBPS Standby Battery Calculator	
Standby Time Required (hours)	24
Communicator Standby Current Draw (Amps)	0.115
Safety Factor	1.25
Required Standby Battery Capacity (AH)	3.45

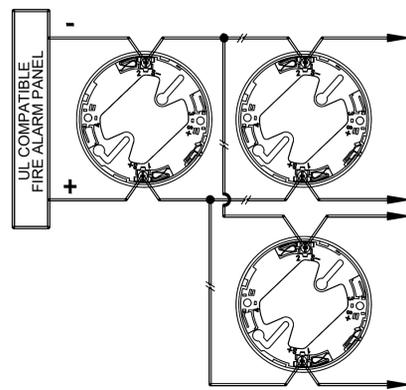
# FACP IPA-4000 WIRING DETAIL



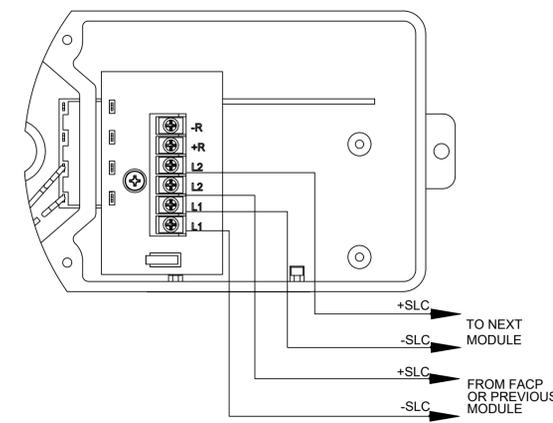
# FIRE ALARM CELLULAR COMMUNICATOR NAPCO SLE-MAX2-CFBPS WIRING DETAIL



# PAD300-6DB DETECTOR BASE WIRING DETAIL

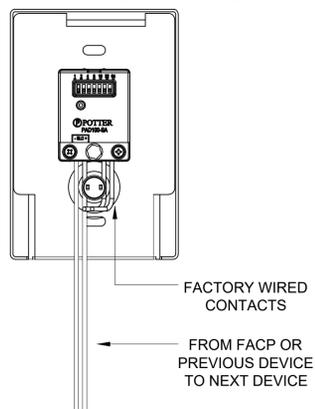


# PAD300-DUCT DUCT DETECTOR WIRING DETAIL

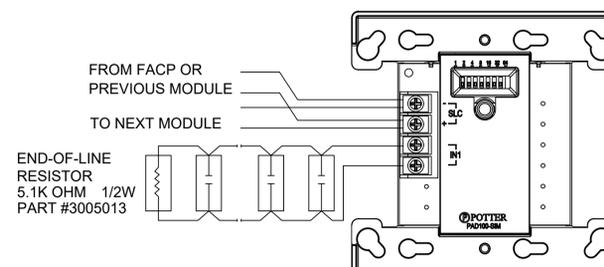


# PAD100-PSSA PULL STATION WIRING DETAIL

PULL STATION BACK VIEW AND WIRING



# PAD100-SIM MONITOR MODULE WIRING DETAIL



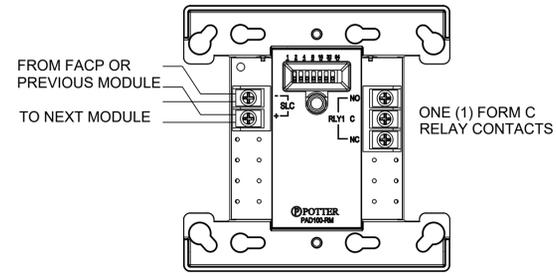
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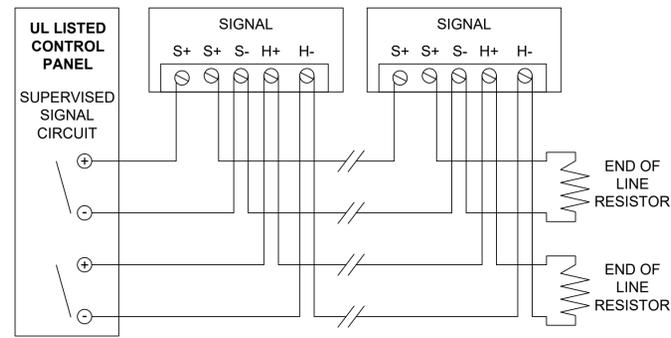
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**FA3.01**

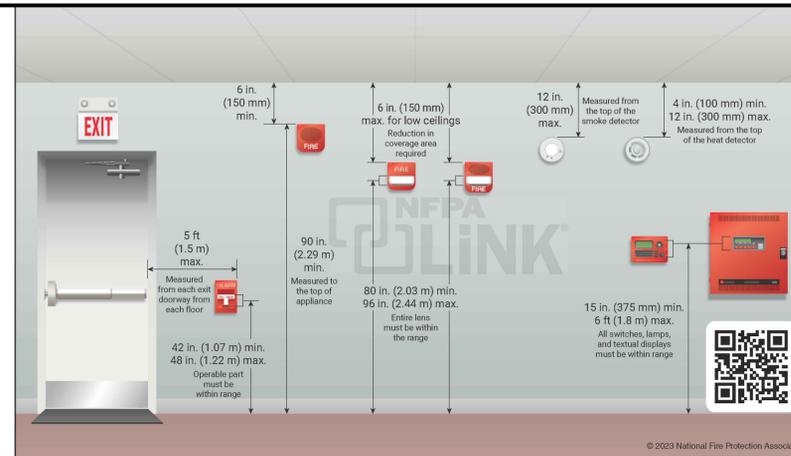
**PAD100-RM CONTROL RELAY MODULE  
WIRING DETAIL**



**POTTER TYPICAL NOTIFICATION  
DEVICE WIRING DETAIL**



**DEVICE MOUNTING DETAIL**



License# MAXPOPE815M9  
5009 Pacific HWY E, Suite 13, Puyallup, WA 98424  
E-mail: service@maxpowerm.com Contact #: (253) 838-4400

Jeremy Locken, ET  
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REV	DESCRIPTION	DATE	BY
0	PLAN CHECK	12/12/2025	LSDS

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FIRE ALARM SYSTEM**  
727 SHAW ROAD E,  
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DRAWN / DESIGN BY	LSDS
CHECKED BY	JL
DATE	12/12/2025
PROJECT NAME	EAST TOWN CROSSING
PROJECT #	12092025
SHEET DETAIL	DEVICE DETAILS
SHEET NUMBER	<b>FA4.01</b>