FIRE ALARM GENERAL NOTES NOTE# NOTE TEXT

- ALL CIRCUIT POLARITY SHALL BE MAINTAINED.
- SHIELD CONTINUITY SHALL BE MAINTAINED THROUGH OUT ALL SHIELDED CIRCUITS. SHIELDS SHALL BE GROUNDED AT ONLY ONE POINT (THE EQUIPMENT HEAD END UNLESS NOTED OTHERWISE).
- ALL CIRCUITS SHALL BE FREE OF GROUNDS, WIRE TO WIRE SHORTS, AND 3 OPENS.
- 4 NOTIFICATION APPLIANCE CIRCUITS (NAC) & INITIATING DEVICE CIRCUITS (IDC) ARE SUPERVISED. NO PARALLEL BRANCHING (TEE-TAPPING) SHALL BE PERMITTED. NON-STYLE 6 & 7 SIGNALING LINE CIRCUITS (SLC) ALLOW PARALLEL BRANCHING (TEE-TAPPING) AT DEVICES AND RISER BOXES ONLY.
- ALL FIRE ALARM CONDUIT SHALL BE SIZED TO MEET OR EXCEED THE NEC MINIMUM REQUIREMENTS. ALL FIRE ALARM CONDUIT SIZE SHALL BE 3/4" MINIMUM UNLESS SHOWN OTHERWISE. STUB-UPS TO INDIVIDUAL DEVICES ALLOWED TO BE IN 1/2".
- INSTALLATION MATERIALS (I.E. CONDUIT, FITTINGS, HANGERS, STANDARD BOXES, ETC.) ARE NOT PROVIDED BY MIDWEST ALARM SERVICES.
- ON OPEN WIRE INSTALLATIONS CONDUIT SHALL BE PROVIDED BY OTHERS THROUGH ALL INACCESSIBLE AREAS (I.E. ABOVE HARD CEILINGS, STUB-UPS THROUGH ENCLOSED WALLS, ECT.) AND IN ALL EXPOSED AREAS (I.E. MECHANICAL ROOMS, ELECTRICAL ROOMS, ETC.).
- MANUAL PULL BOXES SHALL BE MOUNTED 48" AFF TO THE ACTUATING HANDLE.
- WALL-MOUNTED AUDIBLE/VISUAL & VISUAL ONLY DEVICES SHALL BE MOUNTED 80" AFF TO THE BOTTOM OF THE DEVICE OR 6" FROM THE CEILING TO THE TOP OF THE DEVICE WHICHEVER IS LOWER.
- INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE NATIONAL 10 ELECTRIC CODE, NFPA CODES, LOCAL CODES, AUTHORITIES HAVING JURISDICTION AND ALL OF THE MANUFACTURERS REQUIREMENTS.
- ALL FIRE ALARM CONTROL RELAYS SHALL BE MOUNTED WITHIN 3' OF THE 11 DEVICES THEY CONTROL. ALL RELAY CONTROL CIRCUITS SHALL BE
- SUPERVISED. 12. ALL FIRE ALARM JUNCTION BOX COVERS SHALL BE PAINTED RED OR LABELED FOR DISTINCT IDENTIFICATION.
- ALL FIRE ALARM PANELS & EQUIPMENT CABINETS REQUIRE A DEDICATED 120VAC CIRCUIT FOR PRIMARY POWER. FIRE ALARM AC POWER CIRCUITS SHALL BE PERMANENTLY IDENTIFIED AT THE DISTRIBUTION PANEL AND 13. INSIDE THE FIRE EQUIPMENT CABINETS SERVED.

PROJECT NARRATIVE

This project is a new building, use group B. A new fire alarm system with horn/strobe notification and DACT is being installed in the building. The building is fully sprinklered. There is an unattached open lawn/garden product area that is not sprinklered.

AUTHORITY HAVING JURISDICTION City of Lee's Summit, MO

CODE REFERENCES						
	#	REFERENCED CODE	YEAR			
	1	International Building Code (IBC)	2018			
	2	International Fire Code (IFC)	2018			
	3	International Mechanical Code (IMC)	2018			
	4	NFPA 70 National Electrical Code	2017			
	5	NFPA 72 National Fire Alarm Code	2016			

POTTER NAC Circuit Configuration & Voltage Drop Usage: Notificatio Wire Type #14 Solid Sys Sens Horn Strobes Sys Sens P Strobes Sys Sens SF 1 Horn Strobes Sys Sens P2 Usage: Notification #14 Solid Sys Sens PC Sys Sens SC Horn Strobes Strobes 2 Strobes 1 Horn Strobes Sys Sens SC Sys Sens P2 I/O Circuit Configuration & Voltage Drop **SLC Aux Powe** 5 SLC Aux Power Usage: Aux Powe 1 DualComNF-LV **Jnivers**

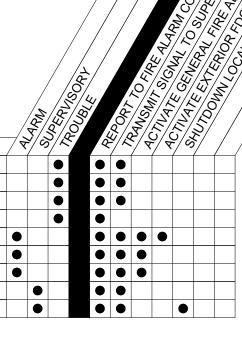
PRIORITY SYSTEM OUTPUTS

FIRE ALARM SEQUENCE OF OPERATIONS:

SYSTEM INPUTS

SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT - OPEN SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT - SHORT SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT - GROUND FIRE ALARM CONTROL PANEL LOSS OF POWER SPRINKLER WATERFLOW SWITCH ACTIVATION MANUAL PULL STATION ACTIVATION SMOKE DETECTOR ACTIVATION

SPRINKLER VALVE TAMPER SWITCH ACTIVATION (NOT USED) DUCT SMOKE DETECTOR ACTIVATION



WESTLAKE ACE HA

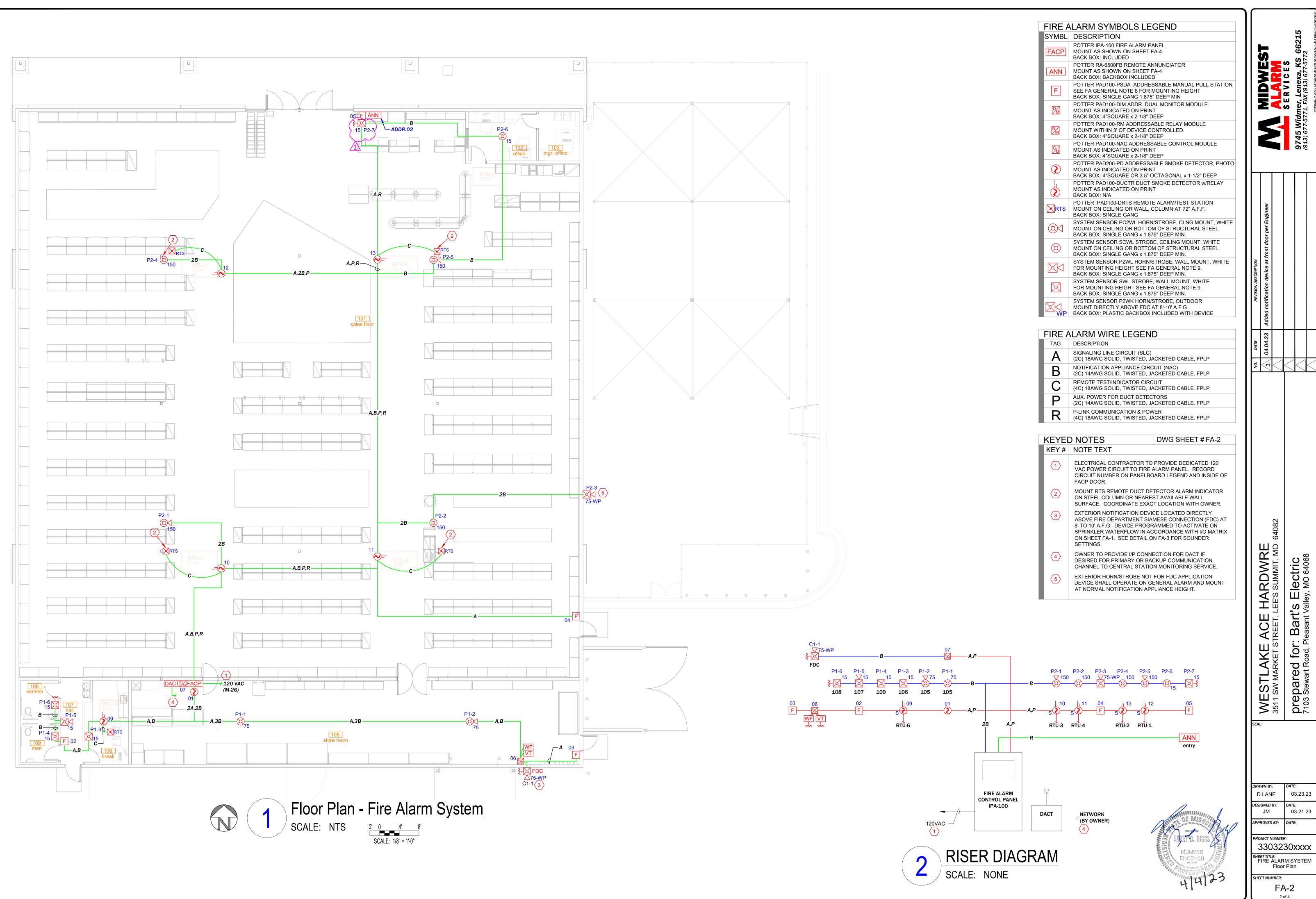
3511 SW MARKE LEE'S SUMMIT, MO 6 Fire Alarm System DRAWING INDEX

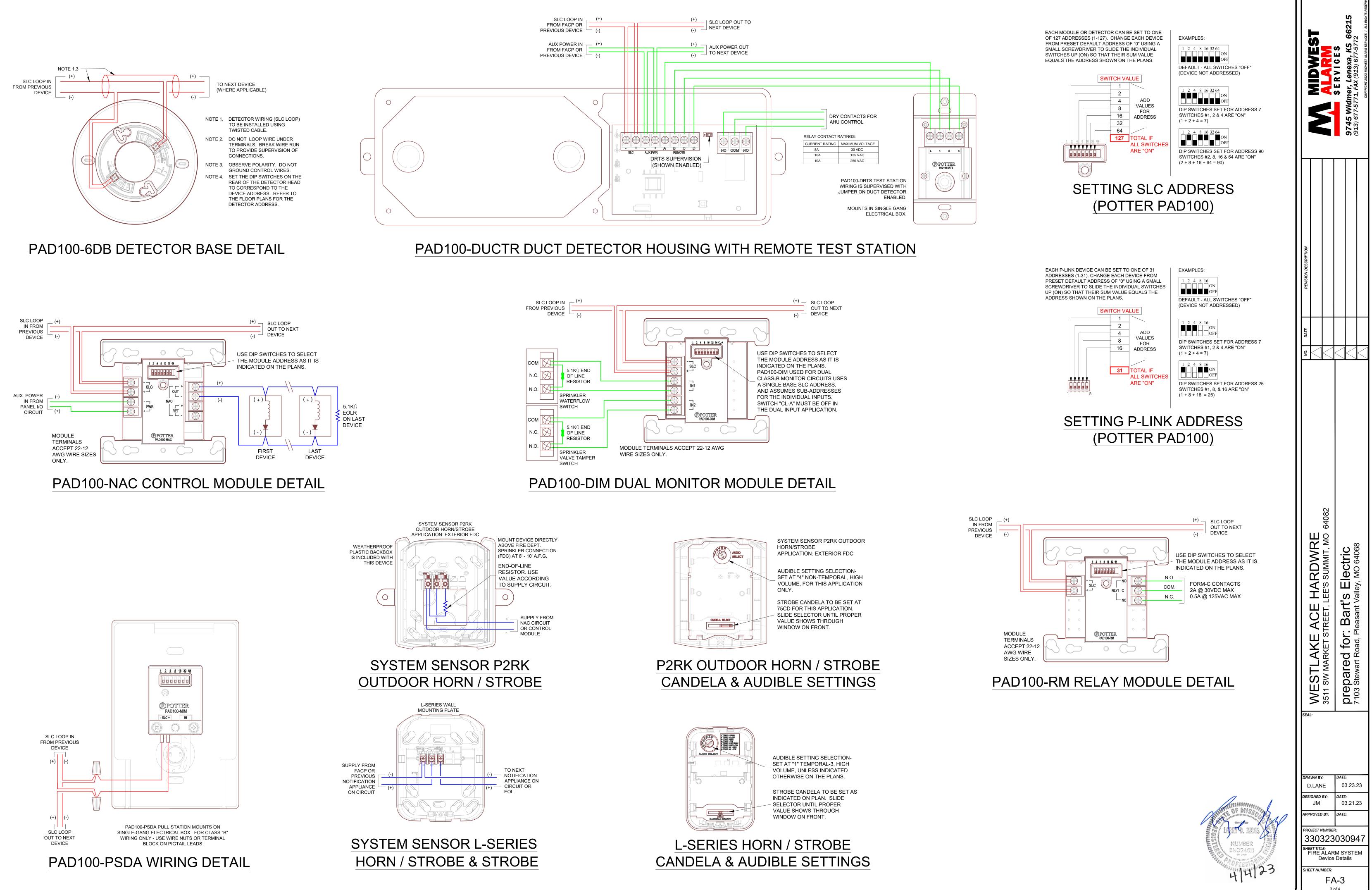
Sheet:	Title:	Revision #:	Date Issued:
FA-1	COVER SHEET, I/O MATRIX, CALCULATIONS	1	04.04.23
FA-2	FIRE ALARM FLOOR PLAN, RISER DIAGRAM	1	04.04.23
FA-3	DEVICE MOUNTING & WIRING DETAILS		03.23.23
FA-4	PANEL WIRING & MOUNTING DETAILS		03.23.23

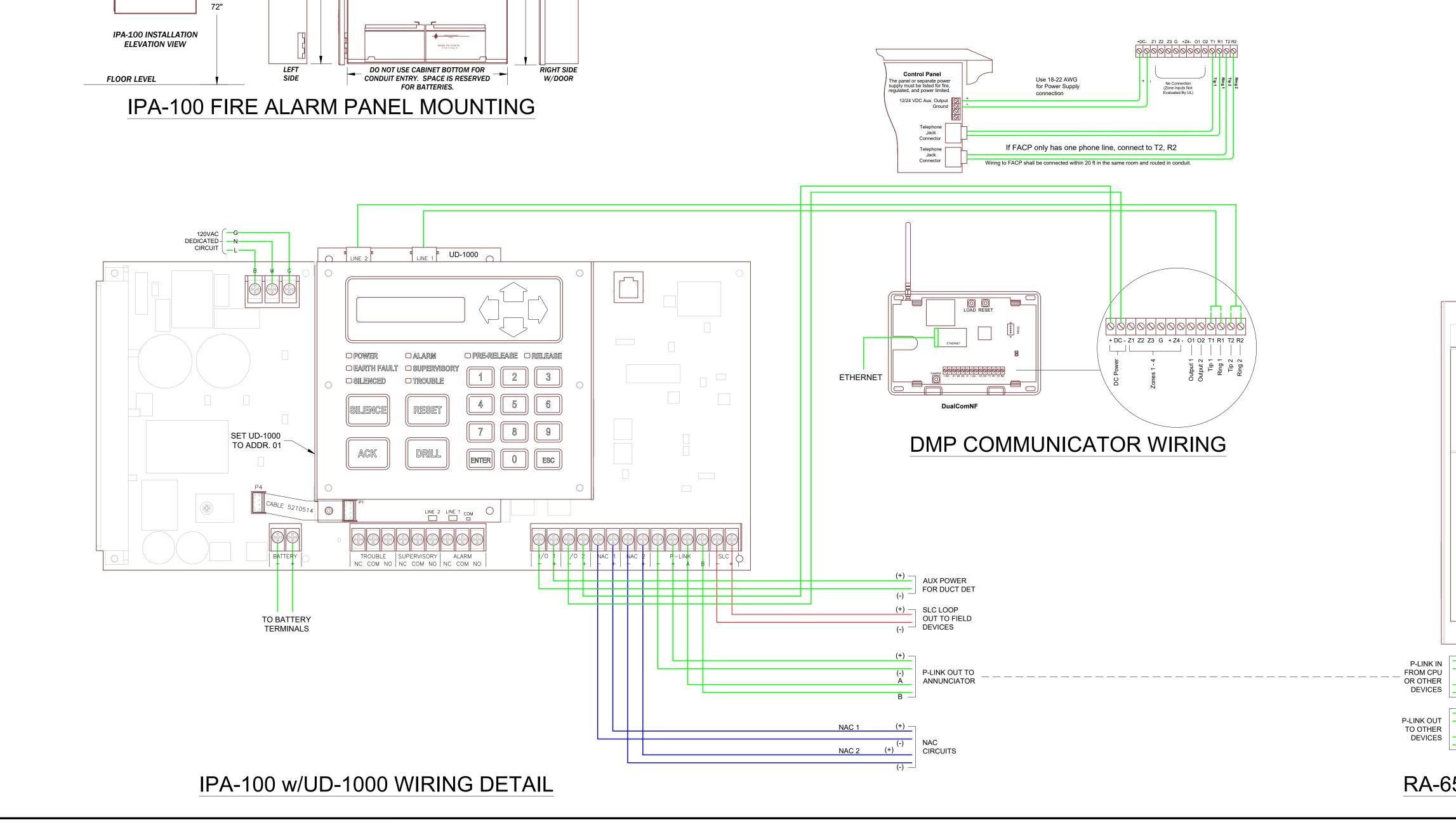
	Wes	tlake Ace Hardware	3/23	/2023
MAX Circuit Current (amps):			urce Voltage Used (VDC): 20.4	
WAX Circuit current (amps):	5.2 C 187		urce voltage Used (VDC): 20.4	
on	Description: Back	Area		
000ft Length 1-Way		ax Load (amps)		Min Volts Req'd
7 200	1.228	0.437	19.86	16
	Standby (amp		Alarm (amps)	and a lot
Description SCRL,SCWL 75cd	Each 0.000000	Total 0.000000	Each 0.111000	Total 0.111000
PC2RL,temp high, 75cd	0.000000	0.000000	0.143000	0.143000
SRL,SWL 15cd	0.000000	0.000000	0.043000	0.129000
P2RL,temp high, 15cd	0.000000	0.000000	0.054000	0.054000
	Total Standby:	0.00000	Total Alarm:	0.43700
MAX Circuit Current (amps):	2	50	urce Voltage Used (VDC): 20.4	
on	Description: From			
000ft Length 1-Way	Actual Ohms M	ax Load (amps)	Volts @ EOL	Min Volts Reg'd
7 410	2.517	1.070	17.71	16
Description	Standby (amp: Each	s) Total	Alarm (amps) Each	Total
C2RL,temp high, 150cd	0.000000	0.000000	0.217000	0.434000
SCRL,SCWL 150cd	0.000000	0.000000	0.189000	0.378000
SCRL,SCWL 15cd	0.000000	0.000000	0.041000	0.082000
2R[K],T3 high, 75cd	0.000000	0.000000	0.176000	0.176000
	Total Standby:	0.00000	Total Alarm:	1.07000
		D,D0000		1.07000
MAN Cinnik Company (Server)	Wes	tlake Ace Hardware	3/23	
MAX Circuit Current (amps):	Wes 1	tlake Ace Hardware		
	Wes 1 Description: Duct	tlake Ace Hardware So Det & FDC strobe	3/23 nurce Voltage Used (VDC): 20.4	/2023
000ft Length 1-Way	Wes 1 Description: Duct	tlake Ace Hardware So	3/23 nurce Voltage Used (VDC): 20.4	
000ft Length 1-Way	1 Description: Duct Actual Ohms M 1.535	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66	/2023 Min Volts Req'd
000ft Length 1-Way	Wes 1 Description: Duct Actual Ohms M	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL	/2023 Min Volts Req'd
22RK,non-temp High, 75cd	Wes 1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000]	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000	/2023 Min Volts Req'd 16 Total 0.176000
22RK,non-temp High, 75cd	Wes 1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.003000	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000 0.003000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000	/2023 Min Volts Req'd 16 Total 0.176000 0.008000
22RK,non-temp High, 75cd	Wes 1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000]	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000	/2023 Min Volts Req'd 16 Total 0.176000 0.008000
22RK,non-temp High, 75cd	Wes 1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.003000	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000 0.003000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000	/2023 Min Volts Reg'd 16
22RK,non-temp High, 75cd	Wes 1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.003000	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000 0.003000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000	/2023 Min Volts Req'd 16 Total 0.176000 0.008000
22RK,non-temp High, 75cd	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 0.030000 Total Standby:	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 ;) Total 0.000000 0.150000 0.150000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000	/2023 Min Volts Reg'd 16 Total 0.176000 0.008000 0.300000
Description Description P2RK,non-temp High, 75cd D100-NAC Output Module D100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps):	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 0.030000 Total Standby:	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000 0.003000 0.150000 0.150000 0.153000	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000 Total Alarm:	/2023 Min Volts Reg'd 16 Total 0.176000 0.008000 0.300000
000ft Length 1-Way 7 250 Description 22RK,non-temp High, 75cd 0100-NAC Output Module 0100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps):	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 1 Total Standby: 1 Description: DAC	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 5) Total 0.000000 0.003000 0.150000 0.150000 0.153000	3/23 vorce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000 Total Alarm: vorce Voltage Used (VDC): 20.4	/2023 Min Volts Reg'd 16 Total 0.176000 0.008000 0.300000
000ft Length 1-Way 7 250 Description 22RK,non-temp High, 75cd 0100-NAC Output Module 0100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps):	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 1 Total Standby: 1 Description: DAC	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484) Total 0.000000 0.150000 0.150000 0.153000 So	3/23 vorce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000 Total Alarm: vorce Voltage Used (VDC): 20.4	/2023 Min Volts Req'd 16 Total 0.176000 0.008000 0.300000 0.300000
Description Description 22RK,non-temp High, 75cd D100-NAC Output Module D100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps): 0000ft Length 1-Way 7 10	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 1 Total Standby: 1 Description: DAC Actual Ohms M 0.061 Standby (amp: Standby (amp:	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 Total 0.000000 0.150000 0.150000 0.150000 So T ax Load (amps) 0.082)	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000 Total Alarm: urce Voltage Used (VDC): 20.4 Volts @ EOL 20.39 Alarm (amps)	/2023 Min Volts Req'd 16 Total 0.176000 0.008000 0.300000 0.300000 0.300000 0.48400 0.48400 0.48400
000ft Length 1-Way 7 250 Description 22RK,non-temp High, 75cd 0100-NAC Output Module 0100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps):	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 1 Total Standby: 1 Description: DAC Actual Ohms M 0.061	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484) Total 0.000000 0.150000 0.150000 0.15300 0.15300 So T ax Load (amps) 0.082	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.008000 0.060000 Total Alarm: urce Voltage Used (VDC): 20.4 Volts @ EOL 20.39	/2023 Min Volts Req'd 16 Total 0.176000 0.008000 0.300000 0.300000 0.300000
r O00ft Length 1-Way Z 250 Description P2RK,non-temp High, 75cd D100-NAC Output Module D100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps): r O00ft Length 1-Way Z 10	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 1 Total Standby: 1 Description: DAC Actual Ohms M 0.061 Standby (amp: Standby (amp:	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 Total 0.000000 0.150000 0.150000 0.150000 So T ax Load (amps) 0.082)	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000 Total Alarm: urce Voltage Used (VDC): 20.4 Volts @ EOL 20.39 Alarm (amps)	/2023 Min Volts Req'd 16 Total 0.176000 0.008000 0.300000 0.300000 0.300000 0.48400 0.48400 0.48400
Description Description 22RK,non-temp High, 75cd D100-NAC Output Module D100-DUCTR Duct Det w/ Relay MAX Circuit Current (amps): MAX Circuit Length 1-Way 10	1 Description: Duct Actual Ohms M 1.535 Standby (amp: Each 0.000000 0.030000 0.030000 0.030000 1 Total Standby: 1 Description: DAC Actual Ohms M 0.061 Standby (amp: Standby (amp:	tlake Ace Hardware So Det & FDC strobe ax Load (amps) 0.484 Total 0.000000 0.150000 0.150000 0.150000 So T ax Load (amps) 0.082)	3/23 urce Voltage Used (VDC): 20.4 Volts @ EOL 19.66 Alarm (amps) Each 0.176000 0.008000 0.060000 Total Alarm: urce Voltage Used (VDC): 20.4 Volts @ EOL 20.39 Alarm (amps)	/2023 Min Volts Req'd 16 Total 0.176000 0.008000 0.300000 0.300000 0.300000 0.48400 0.48400 0.48400

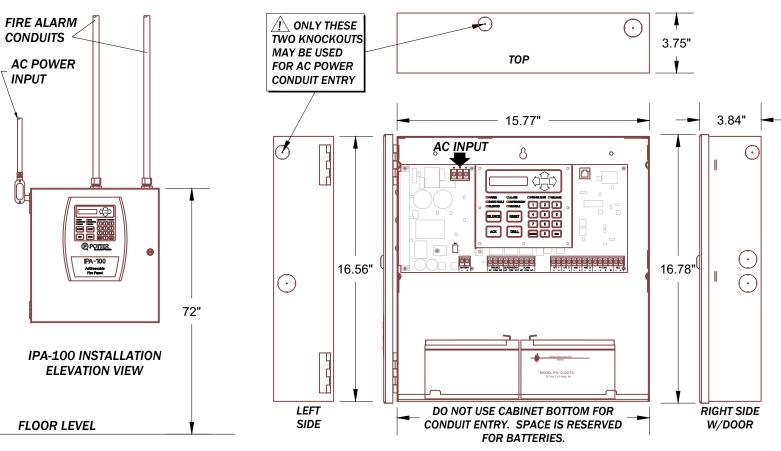
RDW ARDW T 64082 04082 M X: Revision #: Date Is 1 04.04 1 04.04	sued: 4.23					FIRE ALARM SYMBOLS LEGENDSYMBLDESCRIPTIONFACPPOTTER IPA-100 FIRE ALARM PANEL MOUNT AS SHOWN ON SHEET FA-4 BACK BOX: INCLUDEDANNPOTTER RA-6500FB REMOTE ANNUNCIATOR MOUNT AS SHOWN ON SHEET FA-4 	GHT IODULE DDULE DL MODULE ETECTOR, PHOTO I-1/2" DEEP TOR w/RELAY STATION	er MIDWEST	SERVICES 9745 Widmer, Lenexa, KS 66215 913) 677-5771, FAX (913) 677-5772 (913) 677-5771, FAX (913) 677-5772 сорчисни 2023 миочеся лаями верисев /- АЦ RIGHTS RESERVE
03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23 03.23	3.23 3.23 Project Nam Installed B Designed B Dat 1#: IPA-100 ID: FACP on: Back Room 105		Ma	Standby Hours: 24 Alarm Mins: 5 Efficiency Factor: 20% SLC Type: Class NAC Source Voltage: 20.4 x Panel Current (amps): 5 y to ensure the quantities and c prior to submittal. Alarm (amps) Each 0,220		BACK BOX: SINGLE GANG SYSTEM SENSOR PC2WL HORN/STROBE, CLN MOUNT ON CEILING OR BOTTOM OF STRUCTUR BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR SCWL STROBE, CEILING MOR MOUNT ON CEILING OR BOTTOM OF STRUCTUR BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR SCWL STROBE, CEILING MOR MOUNT ON CEILING OR BOTTOM OF STRUCTUR BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR P2WL HORN/STROBE, WALL FOR MOUNTING HEIGHT SEE FA GENERAL NO BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR SWL STROBE, WALL MOUNT FOR MOUNTING HEIGHT SEE FA GENERAL NO BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR P2WK HORN/STROBE, OUTE MOUNT DIRECTLY ABOVE FDC AT 8'-10' A.F.G BACK BOX: PLASTIC BACKBOX INCLUDED WIT	G MOUNT, WHITE JRAL STEEL UNT, WHITE JRAL STEEL MOUNT, WHITE TE 9. T, WHITE TE 9.	REVISION DESCRIPTION Added notification device at front door per Engine	
		Panel Standby:	0.130 0.130	Panel Alarm:	0.220	FIRE ALARM WIRE LEGENDTAGDESCRIPTION		рате 04.04.23	
P-LINK (RS-485) 1 UD-2000 / UD-1000 RA-6075R 1 RA-6500R(F)	DACT Card LCD Annunciator Flush Mount LCD Annunciator	Standby 0.016 0.020 0.020	0.016	Alarm 0.023 0.025 0.050	0.023	ASIGNALING LINE CIRCUIT (SLC) (2C) 18AWG SOLID, TWISTED, JACKETED CABIBNOTIFICATION APPLIANCE CIRCUIT (NAC) (2C) 14AWG SOLID, TWISTED, JACKETED CABI	.E, FPLP	40 04	1<<
CA-6075 PSN-1000(E) PAD100-SLCE-127 IDC-6 IDC-6 RLY-5 RLY-5 RLY-5 (Maximum current draw on P-Link li *Only enter quantity if PLINK power is SLC Devices AFC / ARC / IPA Series 1 PAD-PD PAD-PD PAD-PHD PAD-PHD PAD-HD PAD-CD PAD-PCD PAD-PCD PAD-PCD PAD-PCD PAD-PCD PAD-DUCT 5 PAD-DUCT 5 PAD-DUCTR* 5 PAD100-DRTS 4 PAD100-PTS 4 PAD100-SIM 1 PAD100-SIM 1 PAD100-RM PAD100-RM PAD100-RM PAD100-RTI		0.012 0.015 0.060 0.020 0.030 0.025 0.010 P-LINK Standby: Standby 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000300 0.000200 0.000200 0.000240 0.000240 0.000240 0.000240	0.036 0.000300 0.002500 0.050000 0.000800 0.000240	0,044 0,015 0,060 0,220 0,270 0,035 0,135 P-LINK Alarm: 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000300 0,000200 0,000200 0,000240 0,000240 0,000240 0,000240	0.073 0.000300 0.002500 0.075000 0.000800 0.000240	C REMOTE TEST/INDICATOR CIRCUIT (4C) 18AWG SOLID, TWISTED, JACKETED CABIL P AUX. POWER FOR DUCT DETECTORS (2C) 14AWG SOLID, TWISTED, JACKETED CABIL R P-LINK COMMUNICATION & POWER (4C) 18AWG SOLID, TWISTED, JACKETED CABIL WIRE TAG AND PATHWAY COLOR LEGEND A SIGNALING LINE CIRCUITS B,S NOTIFICATION APPLIANCE O P,R POWER & ANNUNCIATOR DA CABLE IDENTITY - LETTER QUANTITY OF CABLE - NUMBER (NO NUMBER INDICATES QTY O	.E. FPLP .E. FPLP SIRCUITS STA CIRCUITS	64082	
PAD100-ZM* 1 PAD100-NAC* PAD100-SM	Conventional Zone Module Notification Appliance Circuit Speaker Module	0.000240 0.000200 0.000200	0.000200	0.000240 0.000200 0.000200	0.000200		,	IIшо)
PAD 100-IM PAD 100-LED PAD 100-LEDK PAD 100-SB* PAD 100-SB* PAD 100-RB PAD 100-IB * Requires Aux Power (Configuration be Ckt Use		0.000150 0.000240 0.000200 0.000200 0.000200 0.000150 0.000000 SLC Standby: Star	0.000000 0.054040 ndby (amps) Total	0.000150 0.000240 0.000200 0.000200 0.000200 0.000150 0.036000 SLC Alarm:	0.036000 0.115040 Alarm (amps) Total	N' = NAC REMOTE POWER SUPPLY 'P' = FACP PANEL 'V' = VOICE EVAC CIRCUIT NUMBER N1-01→ DEVICE NUMBER END OF LINE RESIST (LAST DEVICE ON CI 30→ CANDELA RATING	OR	HARDWR EE'S SUMMIT, M	Electric
1 Notification 2 Notification	Back Area Front/Sales Area	NAC Standby:	0.00000 0.00000 0.00000	NAC Alarm:	0.43700 1.02900 1.46600	NOTIFICATION APPLIANC	<u>ES</u>		Sart' sant \
I/O Circuits (See I/O Configuration belo Ckt Use 1 Aux Power 2 Aux Power Battery Calculation Summary SLC Loop Typ Device Addresses Us	Description Duct Det & FDC strobe DACT pe: Class B red 12	I/O Standby: Star Panel Current: P-Link Current: SLC Device Current: NAC Circuit Current: I/O Circuit Current: Total Standby: Standby Hours:	ndby (amps) Total 0.15300 0.03000 0.18300 0.18300 0.13000 0.03600 0.03600 0.05404 0.00000 0.18300 0.18300 0.403040 24	I/O Alarm: // Total Alarm: Alarm Mins:	Alarm (amps) Total 0.48400 0.08200 0.56600 Alarm (amps) 0.22000 0.07300 0.11504 1.46600 0.56600 2.44004 5	DETECTORS 01 ADDRESSABLE DEV	ECTORS RESS NUMBER	WESTLAKE A 3511 SW MARKET STRE	Drepared for: 103 Stewart Road, P
Device Addresses Availab Device Addresses Remainin		AH Required: Total Cor	9.68 mbined Standby & Alar	AH Required: m AmpHours Required:	0.21 9.89 20%	NOTICE: ENGINEERED SYSTEMS THE NOTIFICATION APPLIANCES ON THESE DRAWINGS AT PARTICULAR LOCATIONS AND WITH SPECIFIED SET	WERE PLACED	SEAL:	
	NOTIFICATION POWER SU		Batte 8 AH or 18 AH batterie	TS	11.87 12 for up to two 55	BUILDING CODE REQUIREMENTS FOR PROPER AUDIBLE COVERAGE. PLEASE CONSULT WITH YOUR MIDWEST ALARM SERVIC REPRESENTATIVE PRIOR TO MAKING ANY ALTERATION ALARM NOTIFICATION DEVICES OR CIRCUITS. FAILURE INCUR LIABILITY, VOID SYSTEM VIABILITY OR RESULT IN ACCEPTANCE BY THE LOCAL CODE ENFORCEMENT AU ANY UNAPPROVED ALTERATIONS REQUIRING REDESIG ADDITIONAL DEVICES WILL RESULT IN ADDITIONAL CHA	E AND VISUAL CES S TO FIRE TO DO SO MAY I FAILED THORITY (AHJ). N OR	DRAWN BY:	DATE:
Back Area Front sales area duct det aux power/FDC	Sircuit Qty Alm Load Max. P1 6 0.437 A 3.00 A P2 7 1.070 A 3.00 A I/O1 6 0.484 A 1.00 A I/O2 1 0.082 A 1.00 A I/O2 20 2.073 A 5.00 A	% Loaded Length wire 14.57% 196 Ft 14ga s 35.67% 410 Ft 14ga s 48.40% 250 Ft 14ga s 8.20% 10 Ft 14ga s 41.46%	solid Cu 20.4 solid Cu 20.4 solid Cu 20.4	2.52 19.07 2. 1.54 42.15 0.	rop endV 5 V 19.87 7 V 17.71 7 V 19.66 0 V 20.39	NU	MBER 24611 412-3	SHEET TITLE: FIRE ALA Cov Cala SHEET NUMBEI	03.21.23

				FIRE ALARM SYMBOLS LEGEND
RDWARE				SYMBL DESCRIPTION POTTER IPA-100 FIRE ALARM PANEL MOUNT AS SHOWN ON SHEET FA-4 DACK POX: INCLUDED
_				BACK BOX: INCLUDED POTTER RA-6500FB REMOTE ANNUNCIATOR MOUNT AS SHOWN ON SHEET FA-4
				BACK BOX: BACKBOX INCLUDED POTTER PAD100-PSDA ADDRESSABLE MANUAL PULL STATION SEE FA GENERAL NOTE 8 FOR MOUNTING HEIGHT
4082				BACK BOX: SINGLE GANG 1.875" DEEP MIN POTTER PAD100-DIM ADDR. DUAL MONITOR MODULE
				MOUNT AS INDICATED ON PRINT BACK BOX: 4"SQUARE x 2-1/8" DEEP POTTER PAD100-RM ADDRESSABLE RELAY MODULE
				MOUNT WITHIN 3' OF DEVICE CONTROLLED. BACK BOX: 4"SQUARE x 2-1/8" DEEP
-				POTTER PAD100-NAC ADDRESSABLE CONTROL MODULE MOUNT AS INDICATED ON PRINT BACK BOX: 4"SQUARE x 2-1/8" DEEP
• •				POTTER PAD200-PD ADDRESSABLE SMOKE DETECTOR, PHOTO MOUNT AS INDICATED ON PRINT PACK POX: 4"SOLIABE OB 2.5" OCTACONAL × 1.1/2" DEED
evision #: Date Issued:				BACK BOX: 4"SQUARE OR 3.5" OCTAGONAL x 1-1/2" DEEP POTTER PAD100-DUCTR DUCT SMOKE DETECTOR w/RELAY MOUNT AS INDICATED ON PRINT
<u>1</u> 04.04.23 1 04.04.23				Impound as indicated on print BACK BOX: N/A POTTER PAD100-DRTS REMOTE ALARM/TEST STATION MOUNT ON OFFLUNC OF WALL COLUMN AT 2014 F.5.
03.23.23				MOUNT ON CEILING OR WALL, COLUMN AT 72" A.F.F. BACK BOX: SINGLE GANG SYSTEM SENSOR PC2WL HORN/STROBE, CLNG MOUNT, WHITE
03.23.23				MOUNT ON CEILING OR BOTTOM OF STRUCTURAL STEEL BACK BOX: SINGLE GANG x 1.875" DEEP MIN.
			-	SYSTEM SENSOR SCWL STROBE, CEILING MOUNT, WHITE MOUNT ON CEILING OR BOTTOM OF STRUCTURAL STEEL BACK BOX: SINGLE GANG x 1.875" DEEP MIN.
The Symbol of Protection	Westlake Ace Hardware 3511 SW Market, Lee's Summit, MO Midwest Alarm Services	Standby Hours: 24 Alarm Mins: 5 Efficiency Factor: 209		SYSTEM SENSOR P2WL HORN/STROBE, WALL MOUNT, WHITE FOR MOUNTING HEIGHT SEE FA GENERAL NOTE 9.
Battery & Voltage Drop Designed By:		SLC Type: Cla NAC Source Voltage: 20.	iss B	FOR MOUNTING HEIGHT SEE FA GENERAL NOTE 9. BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR SWL STROBE, WALL MOUNT, WHITE FOR MOUNTING HEIGHT SEE FA GENERAL NOTE 9. BACK BOX: SINGLE GANG x 1.875" DEEP MIN
Model #: IPA-100 Panel ID: FACP		Max Panel Current (amps): 5		BACK BOX: SINGLE GANG x 1.875" DEEP MIN. SYSTEM SENSOR P2WK HORN/STROBE, OUTDOOR MOUNT DIRECTLY ABOVE FDC AT 8'-10' A.F.G
Location: Back Room 105 Addressable Fire Panel	in this worksheet Standby (amps)	are accurate prior to submittal. Alarm (amps	5)	WP BACK BOX: PLASTIC BACKBOX INCLUDED WITH DEVICE
Y Part # Description IPA-100 Analog Addressable FACP	0.130	Total Each 0.130 0.220 0.130 Panel Alarm:	Total 0.220 0.220	FIRE ALARM WIRE LEGEND
P-LINK (RS-485)	Standby	Alarm		TAG DESCRIPTION A SIGNALING LINE CIRCUIT (SLC) (2C) 18AWG SOLID, TWISTED, JACKETED CABLE, FPLP
UD-2000 / UD-1000 DACT Card RA-6075R LCD Annunciator RA-6500R(F) Flush Mount LCD Annunciator	0.020 0.020	0.016 0.023 0.025 0.020 0.050	0.023	A (2C) 18AWG SOLID, TWISTED, JACKETED CABLE, FPLP B NOTIFICATION APPLIANCE CIRCUIT (NAC) (2C) 14AWG SOLID, TWISTED, JACKETED CABLE. FPLP
LED-16(F) Flush Mount LED Annunciator LED-16 LED Annunciator LED Power* CA-6075 Class A Module	0.025 0.015 0.012	0.025 0.210 0.044		C REMOTE TEST/INDICATOR CIRCUIT (4C) 18AWG SOLID, TWISTED, JACKETED CABLE. FPLP
PSN-1000(E) Power Expander PAD100-SLCE-127 SLC Expander IDC-6 Initating Zone Expander	0.015 0.060 0.020	0.015 0.060 0.020		P AUX. POWER FOR DUCT DETECTORS (2C) 14AWG SOLID, TWISTED, JACKETED CABLE. FPLP
IDC-6 Initating Zone Expander Power* RLY-5 Relay Expander RLY-5 Relay Expander	0.030 0.025 0.010	0.270 0.035 0.135		R P-LINK COMMUNICATION & POWER (4C) 18AWG SOLID, TWISTED, JACKETED CABLE. FPLP
ximum current draw on P-Link limited to 1 Amp) Iy enter quantity if PLINK power is being used to power devices SLC Devices	P-LINK Standby: Standby	0.036 P-LINK Alarm	0.073	
PAD-PD Analog Photo Smoke PAD-PHD Analog Photo Smoke	0.000300 0.00	00300 0.000300 0.000300	0.000300	WIRE TAG AND PATHWAY COLOR LEGEND
PAD-HD Analog Fixed Temp Heat PAD-CD Analog Carbon Monoxide Detector PAD-PCD Analog Smoke/Carbon Monoxide Detector	0.000300 0.000300 0.000300	0.000300 0.000300 0.000300		→ B,S → R NOTIFICATION APPLIANCE CIRCUITS
PAD-PHCD Analog Smoke/Heat/Carbon Detector PAD-DUCT Addressable Duct Detector PAD-DUCTR* Add. Duct Detector w/Relay	0.000300 0.000300	0.000300 0.000300 0.000300 0.000500	0.002500	P,R POWER & ANNUNCIATOR DATA CIRCUITS
PAD100-DRTS Duct Remote Test Switch PAD100-PSSA/PSDA Add. Pull Station Single/Dual Action PAD100-MIM Micro Input Module	0.010000 0.05	50000 0.015000 00800 0.000200 0.000200	0.075000 0.000800	QUANTITY OF CABLE - NUMBER
PAD100-SIM Single Input Module PAD100-DIM Dual Input Module PAD100-RM Relay Module	0.000240	0.000240 0.000240 0.000240 0.000240	0.000240	(NO NUMBER INDICATES QTY OF ONE)
PAD100-OROI One Relay One Input Module PAD100-TRTI Two Relay Two Input Module PAD100-ZM* Conventional Zone Module	0.000240 0.000240 0.000240	0.000240 0.000240 0.000240 0.000240		DEVICE NUMBERING DETAILS
PAD100-NAC* Notification Appliance Circuit PAD100-SM Speaker Module PAD100-IM Isolator Module		00200 0.000200 0.000200 0.000200 0.000150	0.000200	TYPE OF SIGNAL CIRCUIT 'N' = NAC REMOTE POWER SUPPLY
PAD100-LED LED Module PAD100-LEDK Addressable LED w/ Key Switch PAD100-SB* Addressable Sounder Base	0.000240 0.000200	0.000240 0.000200		'P' = FACP PANEL 'V' = VOICE EVAC
PAD100-RB Addressable Relay Base PAD100-IB Addressable Isolator Base	0.000200 0.000200 0.000150	0.000200 0.000200 0.000150		
SLC Loop Alarm LED Current Requires Aux Power (Configure Below)	SLC Standby: 0.0	00000 0.036000 54040 SLC Alarm:	0.036000 0.115040	END OF LINE RESISTOR (LAST DEVICE ON CIRCUIT)
Circuits (See NAC Configuration below) t Use Description Notification Back Area Notification Front/Sales Area		95) 00000 00000	Alarm (amps) Total 0.43700 1.02900	30- CANDELA RATING
Circuits (See I/O Configuration below)	NAC Standby: 0.0 Standby (amp	00000 NAC Alarm:	1.46600 Alarm (amps)	
at Use Description Aux Power Duct Det & FDC strobe Aux Power DACT	Total 0.:	15300 03000	Total 0.48400 0.08200	MODULES POTTER - NUMBERS ONLY FOR
Battery Calculation Summary	I/O Standby: 0.: Standby (amp	18300 I/O Alarm:	0.56600 Alarm (amps)	MODULES & DETECTORS DEVICE ADDRESS NUMBER (1-127)
	Panel Current: 0,. P-Link Current: 0,0	13000 03600 05404	0.22000 0.07300 0.11504	DETECTORS 01
	NAC Circuit Current: 0.0 I/O Circuit Current: 0.0	00000	1.46600 0.56600	ADDRESSABLE DEVICES
SLC Loop Type: Class B Device Addresses Used 12 Device Addresses Available: 127	Total Standby: 0.4 Standby Hours: AH Required:	24 Total Alarm: 24 Alarm Mins: 9.68 AH Required:	2.44004 5 0.21	NOTICE: ENGINEERED SYSTEMS
Device Addresses Remaining: 115	Total Combined Sta	andby & Alarm AmpHours Required: Efficiency Factor:	9.89 20%	THE NOTIFICATION APPLIANCES ON THESE DRAWINGS WERE PLACED AT PARTICULAR LOCATIONS AND WITH SPECIFIED SETTINGS TO MEET BUILDING CODE REQUIREMENTS FOR PROPER AUDIRUS AND VISUAL
	Note: The action of the	Required Battery AmpHours: Battery AmpHours Provided:	11.87 12	BUILDING CODE REQUIREMENTS FOR PROPER AUDIBLE AND VISUAL COVERAGE. PLEASE CONSULT WITH YOUR MIDWEST ALARM SERVICES
NOTIFICATION POWER SUM	Note: The cabinet will house two 8 AH or 18 AH batteries.		ed for up to two 55	REPRESENTATIVE PRIOR TO MAKING ANY ALTERATIONS TO FIRE ALARM NOTIFICATION DEVICES OR CIRCUITS. FAILURE TO DO SO MAY INCUR LIABILITY, VOID SYSTEM VIABILITY OR RESULT IN FAILED ACCEPTANCE BY THE LOCAL CODE ENFORCEMENT AUTHORITY (AHJ). ANY UNAPPROVED ALTERATIONS REQUIRING REDESIGN OR ADDITIONAL DEVICES WILL RESULT IN ADDITIONAL CHARGES.
Back Area P1 6 0.437 A 3.00 A	LoadedLengthwire type4.57%196 Ft14ga solid Cu		0.5 V 19.87	
uct det aux power/FDC 1/01 6 0.484 A 1.00 A 4	35.67% 410 Ft 14ga solid Cu #8.40% 250 Ft 14ga solid Cu 8.20% 10 Ft 14ga solid Cu	20.4 1.54 42.15	2.7 V 17.71 0.7 V 19.66 0.0 V 20.39	ANNER OF MISSING
		20.7 0.00 240.78	20.38	
TOTALS 20 2.073 A 5.00 A	41.46%			NUMBER AS
				EN024611

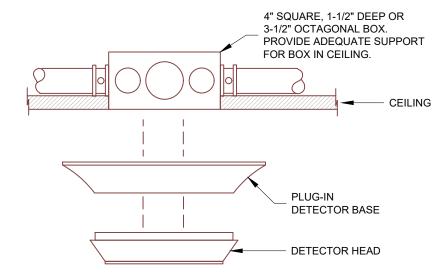


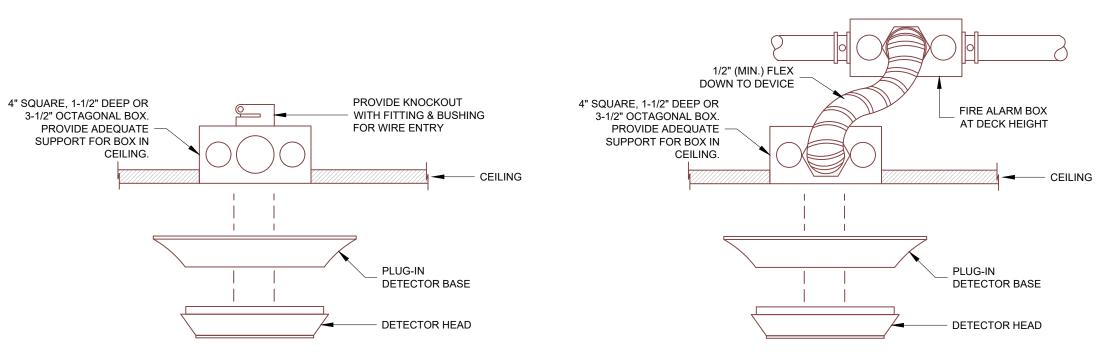






BOX MOUNTING IN SHEETROCK OR PLASTER TYPE CEILINGS (MUST BE INSTALLED WITH CONDUIT) BOX MOUNTING IN LIFT OUT OR INTERLOCKING TYPE CEILINGS FOR SYSTEMS WITH CABLE INSTALLED IN PLENUM





BOX MOUNTING IN LIFT OUT OR INTERLOCKING TYPE CEILINGS WITH SYSTEMS INSTALLED IN CONDUIT

