



TIME: 12:25 pm

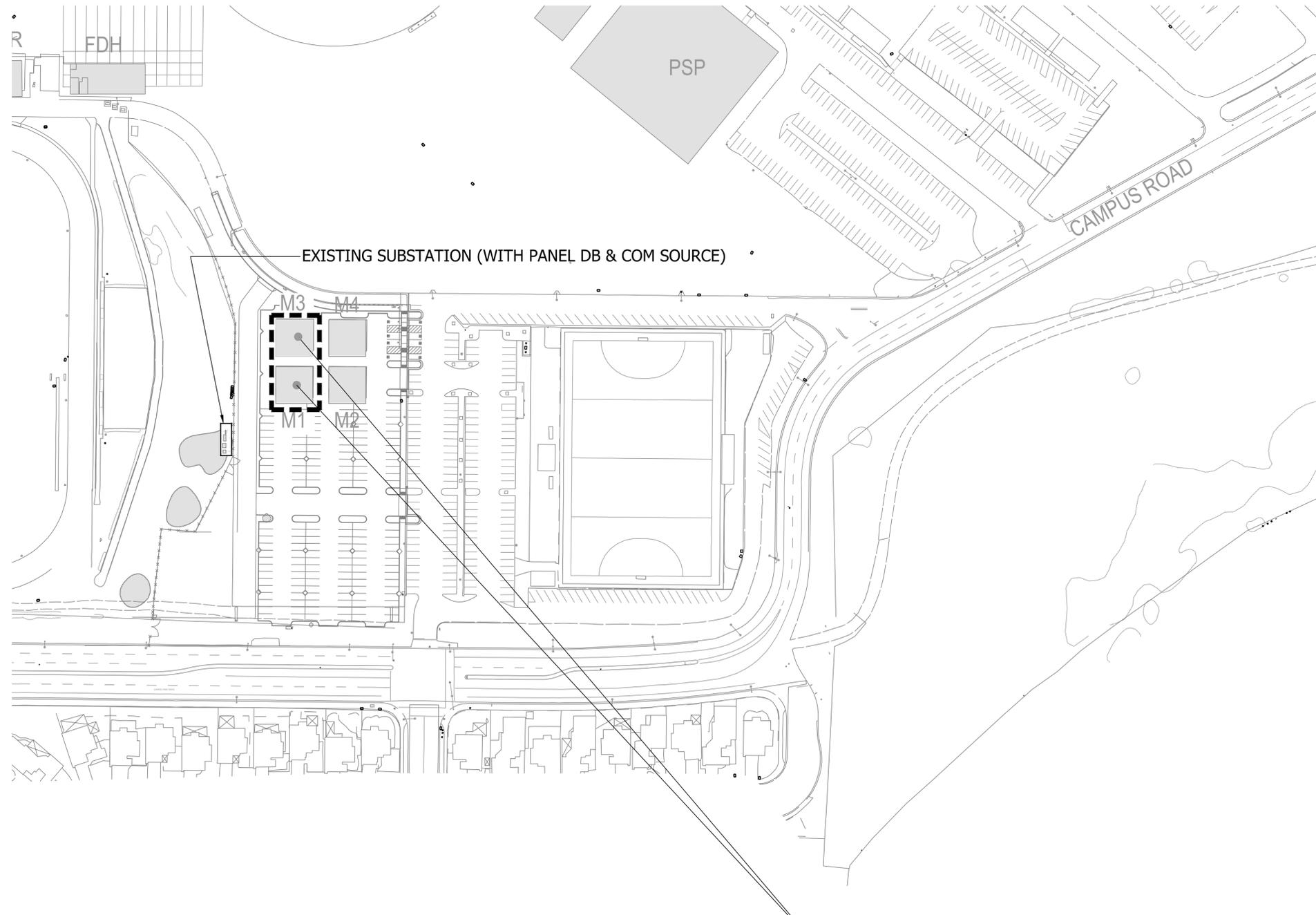
DATE: 8 October 2024

PATHNAME: G:\24\819\EL\Sheets\02-MODULAR BUILDINGS

DRAWING FILENAME: 24-819E130

DRAFTER: CH02

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**PROJECT AREA  
MODULAR M1 & M3**



**SITE ELECTRICAL PLAN PORTABLE CLASSROOM M1 & M3**  
SCALE: 1"=60'-0"



**SHEET NOTES:**

1. FIELD VERIFY LOCATION OF ALL BUILDINGS AND APPENDITURES ON ARCHITECTURAL AND CIVIL PLANS.



7075 CAMPUS RD  
MOORPARK, CA 93021  
TEL: (805) 378-1400

PROJECT TITLE AND SCHOOL LOCATION  
**ALTERATION OF TWO  
PORTABLE  
CLASSROOMS - M1 & M3**

7075 CAMPUS RD.  
MOORPARK, CA 93021

COMMISSIONED ARCHITECT

**AMADOR**

28328 AGOURA RD, 203 | AGOURA HILLS, CA, 91301 | 905-598-4334

CONSULTANT  
**LUCCI & ASSOCIATES INC.**  
CONSULTING ELECTRICAL ENGINEERS  
3251 CORTE MALPASO, #511  
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STAMPS/SEALS



CONSTRUCTION DRAWINGS 31 JULY 2024

SHEET TITLE

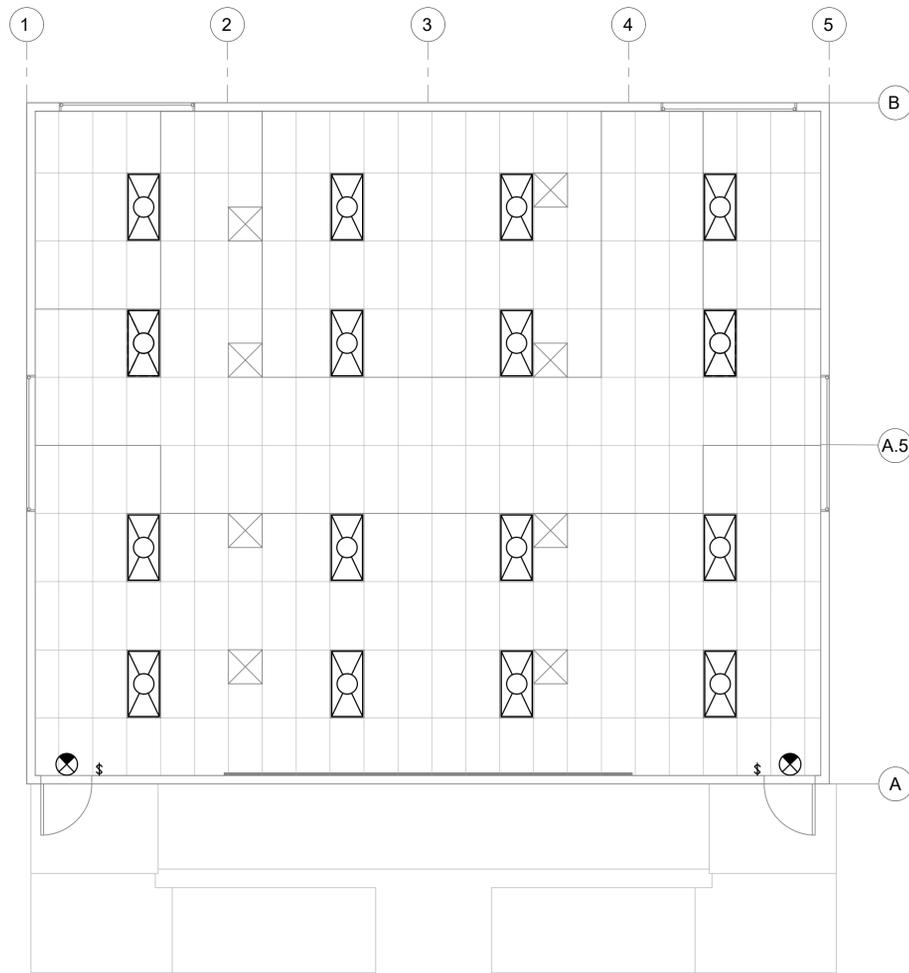
**SITE ELECTRICAL PLAN  
PORTABLE CLASSROOM  
M1 & M3**

PROJECT NO: 22-MPC-042	PROJECT ARCH: Designer
DRAWN: Author	CHECKED: Checker
SHEET NUMBER	

**E130**

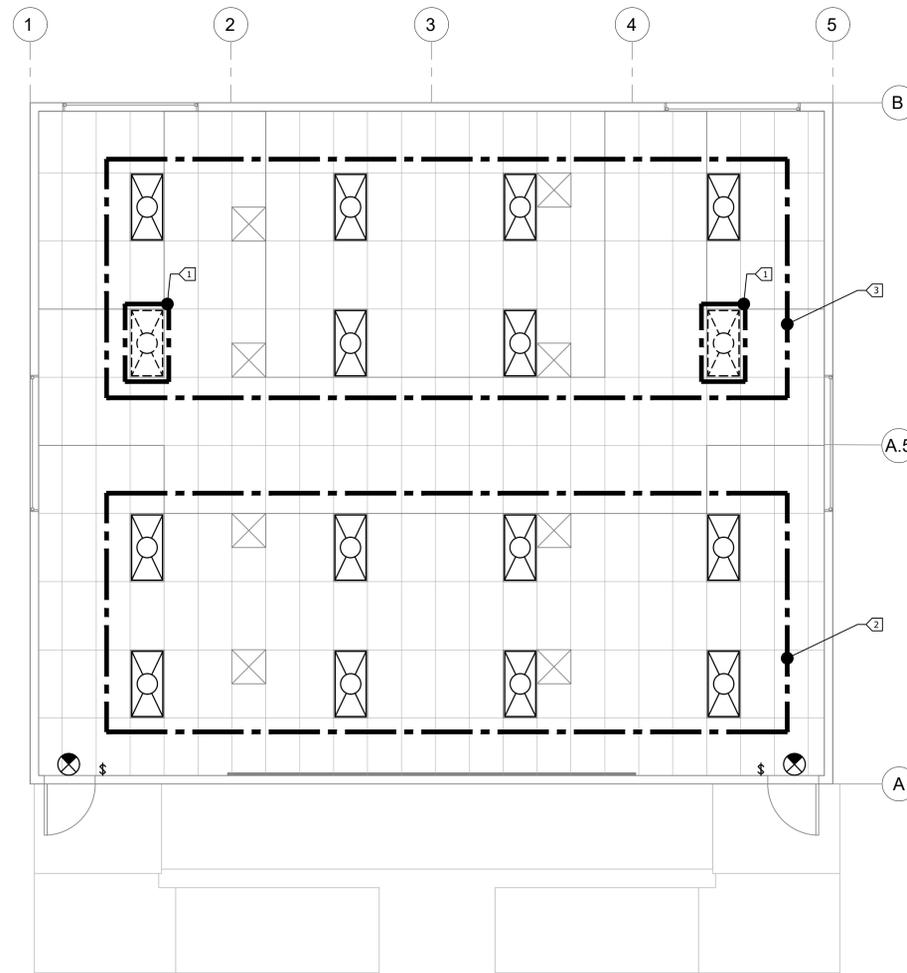
DATE: 7/31/24	SHEET: OF
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ALL EXISTING LIGHTING & CONTROL FIXTURES TO REMAIN



SCALE: 1/8"=1'-0" SCALE: 1/4"=1'-0"

LIGHTING DEMOLITION PLAN PORTABLE CLASSROOM (M3)



SCALE: 1/8"=1'-0" SCALE: 1/4"=1'-0"

LIGHTING DEMOLITION PLAN PORTABLE CLASSROOM (M1)



SHEET NOTES (SCOPE):

1. PROVIDE AND PERFORM DEMOLITION, PREPARATORY AND MISCELLANEOUS WORK IN AREAS AS INDICATED AND SPECIFIED, COMPLETE.
2. PREPARE EXISTING BUILDING TO RECEIVE OR CONNECT THE NEW WORK OR REVISIONS.
3. PROVIDE MISCELLANEOUS DEMOLITION, CUTTING, ALTERATION, AND REPAIR WORK IN THE EXISTING BUILDING NECESSARY FOR THE COMPLETION OF THE ENTIRE PROJECT.
4. DISCONNECT AND RECONNECT ELECTRICAL EQUIPMENT AS REQUIRED BY THE CONSTRUCTION MODIFICATIONS.
5. FIELD VERIFY EXISTING CONDITIONS- PRIOR TO BID MAKE A DETAILED SURVEY OF ALL EXISTING STRUCTURES, EQUIPMENT AND WIRING (BRANCH CIRCUITING AND CONTROLS), CHECK FOR ANY HAZARDOUS MATERIALS WHICH MAY REQUIRE SPECIAL HANDLING.
6. SALVAGE AND DISPOSAL- ALL REMOVED MATERIAL OTHER THAN ITEMS TO BE REUSED SHALL BE RETURNED TO THE OWNER OR DISPOSED OF IN ACCORDANCE WITH INSTRUCTIONS FROM THE OWNER'S REPRESENTATIVE. DISPOSAL SHALL BE DONE IN ACCORDANCE WITH EPA AND GOVERNING BODY REQUIREMENTS AND REGULATIONS. CONTRACTOR SHALL PAY ALL FEES AND CHARGES FOR DISPOSAL.
7. SCHEDULE ALL WORK AND OUTAGES WITH OWNERS WRITTEN APPROVAL.
8. CONTRACTOR SHALL LEAVE ALL CIRCUITS ENERGIZED TO DEVICES IN AREAS OUTSIDE OF DEMOLITION AREA EVEN IF FEEDERS ARE ROUTED THROUGH DEMOLITION AREA.

KEY NOTES:

- 1 TO BE RELOCATED PER E301 & CONNECT/REVISED LIGHTING CONTROL (PROVIDE SUPPORT PER E300).
- 2 REUSE EXISTING ROOM LIGHTING CONTROL FOR THESE FIXTURES, REMOVE CONTROL CONNECTION TO FIXTURES NOTED PER 3 & MAKE SAFE ALL CONNECTIONS.
- 3 PROVIDE NEW LIGHTING CONTROL PER E301.

LEGEND (EXISTING)

- 2'x4' LED DROP IN FIXTURE, MODEL: LITHONIA, VLED 2VTL4, 4000K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT CZN 16)
- EMERGENCY EXIT LIGHT, - WHERE THERE ARE TWO OR MORE EXITS, AN EXIT SIGN
- EMERGENCY EGRESS LIGHT WITH INTEGRAL EMERGENCY LIGHTING W/MINIMUM 90-MINUTE BATTERY BACK-UP IS REQUIRED, LITHONIA EMLS
- \$ LIGHTING CONTROL SYSTEM

DO NOT DISCONNECT EXISTING FA SYSTEM OR SHUT DOWN IDF OR COM RACKS



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ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3

7075 CAMPUS RD. MOORPARK, CA 93021

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AMADOR

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CONSTRUCTION DRAWINGS 31 JULY 2024

LIGHTING DEMOLITION PLAN PORTABLE CLASSROOM (M1) & (M3)

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker

E131

DATE: 7/31/24 SHEET: OF



DATE: 8 October 2024

TIME: 12:25 pm

PATHNAME: G:\24\819\EL\Sheets\02-MODULAR BUILDINGS

DRAWING FILENAME: 24-819E200

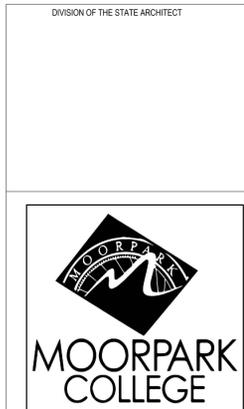
DRAFTER: CH02

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Panel:		EP-A [1A & 3A]		PHASE:		VOLTS:		MAIN (AMPS):		BUSS (AMPS):		LOCATION:		FEED:		MOUNTING:					
OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS		BRK	POLE	WIRE SIZE	CKT #	LEG A	LEG B	CKT #	WIRE SIZE	POLE	BRK	WATTS		LCL	QTY	WATTS PER	OBJECT DESCRIPTION
				A	B											A	B				
HVAC	5280	1	X	5280		70	2	#4	1	X	2	#12	1	20	800		16		50		LIGHTS
HVAC	5280	1	X		5280	70	2	#4	3	X	4	#12	1	20		900		5		180	RECEPTS
EXTERIOR LIGHTS	40	2		80		20	1	#12	5	X	6	#12	1	20	22		2		11		EXIT LIGHTS
WP/GFCI	180	1		180		20	1	#12	7	X	8	#12	1	20	360		1		360		F/A
				0					9	X	10				0						
				0					11	X	12				0						
				0					13	X	14				0						
				0					15	X	16				0						
				0					17	X	18				0						
				0					19	X	20				0						
LEG TOTALS				5360	5460										822	1260					LEG TOTALS
LCL=2640+1200=15542				TOTAL WATTS: 15542				LEG BALANCE: 4.2%				TOTAL AMPS: 74.72									

Panel:		EP-B [1B & 3B]		PHASE:		VOLTS:		MAIN (AMPS):		BUSS (AMPS):		LOCATION:		FEED:		MOUNTING:					
OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS		BRK	POLE	WIRE SIZE	CKT #	LEG A	LEG B	CKT #	WIRE SIZE	POLE	BRK	WATTS		LCL	QTY	WATTS PER	OBJECT DESCRIPTION
				A	B											A	B				
HVAC	5280	1	X	5280		70	2	#4	1	X	2	#12	1	20	1260		7		180		RECEPTS
HVAC	5280	1	X		5280	70	2	#4	3	X	4	#12	1	20		180		1		180	WP/GFI RECEPT
				0					5	X	6				0						
				0					7	X	8				0						
				0					9	X	10				0						
				0					11	X	12				0						
				0					13	X	14				0						
				0					15	X	16				0						
				0					17	X	18				0						
				0					19	X	20				0						
LEG TOTALS				5280	5280										1260	180					LEG TOTALS
LCL=2640+1200=14640				TOTAL WATTS: 14640				LEG BALANCE: 9.0%				TOTAL AMPS: 70.38									

EXISTING PANEL SCHEDULES FOR MODULARS (M1) & (M3) 2  
 SCALE: NONE  
 SAME SCHEDULE FOR PANEL 1A/1B & 3A/3B FOR MODULARS 1 & 3 RESPECTIVELY



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PROJECT TITLE AND SCHOOL LOCATION  
**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

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CONSTRUCTION DRAWINGS 31 JULY 2024

SHEET TITLE  
**EXISTING ELECTRICAL SINGLE LINE DIAGRAM FOR M1, M2, M3 & M4**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
 DRAWN: Author CHECKED: Checker

SHEET NUMBER  
E200

DATE: 7/31/24 SHEET: OF

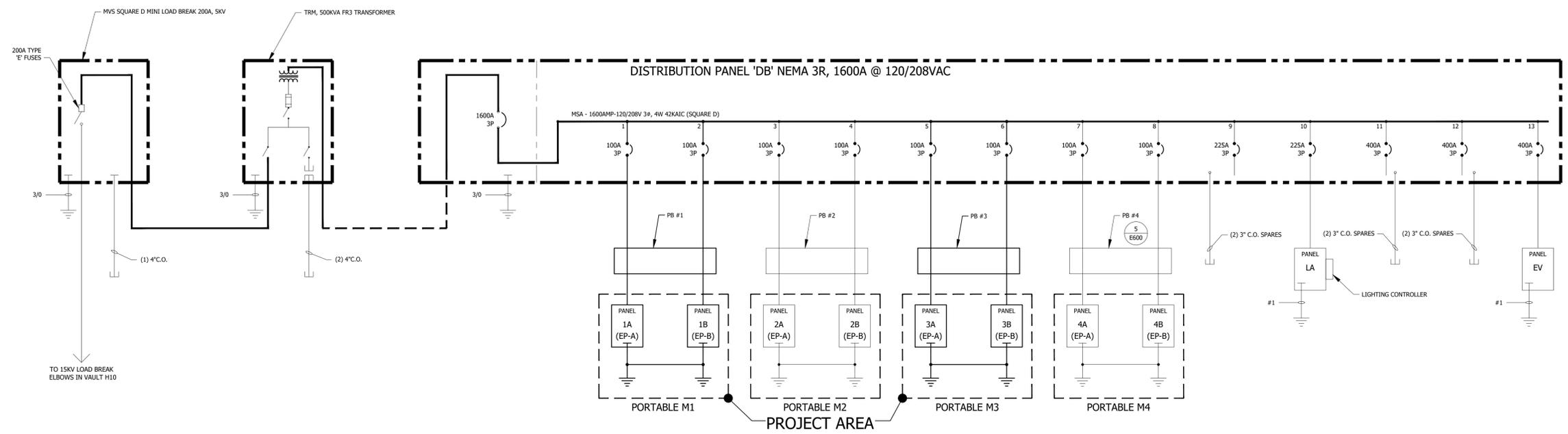
L.A.I.# 24-819 PAPER SIZE 42"x30"

ALL EXISTING PANELS SHALL REMAIN. CONTRACTOR SHALL ADD CIRCUIT BREAKERS (MATCH TYPE & AIC RATING) & LOAD TO THE EXISTING PANEL AS NOTED

ALL EQUIPMENT SHOWN IS EXISTING U.O.N.

SHEET NOTES:

- FIELD VERIFY LOCATION OF ALL BUILDINGS AND APPENDICES.
- CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL ELECTRICAL DEVICES PRIOR TO BID. ROUGH-IN & INSTALLATION.
- CONTRACTOR TO PROVIDE GROUND CONDUCTORS IN ALL CONDUITS.
- 1" CONDUIT MINIMUM UNDERGROUND, 3/4" ABOVE GROUND, STEEL MC CABLE IS ALLOWED.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT.
- CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE AND PER LOCAL AUTHORITIES HAVING JURISDICTION.



EXISTING ELECTRICAL SINGLE LINE DIAGRAM 1  
 SCALE: NONE



### FEATURES & SPECIFICATIONS

**INTENDED USE** — Provides a minimum of 90 minutes illumination for the rated wattage upon loss of AC power to meet and exceed code required emergency lighting. Ideal for applications requiring attractive LED unit equipment with quick installation and unparalleled performance for mounting heights from 7.5 to 30'. **Certain airborne contaminants can diminish the integrity of acrylic and polycarbonate.** Click here for Acrylic/Polycarbonate Compatibility table for available uses.

**CONSTRUCTION** — The housing is a standard white (black optional) thermoplastic with a compact and low-profile contemporary design. It is 5VA flame rated, impact resistant, scratch resistant and corrosion proof. The UV stable resin resists discoloration from natural and man-made light sources. There is a low-profile, integrated and back-lit test switch with an easily visible multi-color LED status indicator. The back-plate contains a universal J-box mounting pattern to facilitate ease of installation on a wide variety of boxes and the front housing allows tool-less access for ease of maintenance.

The lamp heads have a unique track-and-swivel arrangement permitting full range of direction of optical aiming.

**OPTICS** — The ELM6L features two high-performance LEDs rated at 3.3 watts per lamp head and delivers a total of 640 lumens in a spot pattern (SP640L).

The ELM6L features three high-performance LEDs rated at 5.3 watts per lamp head and delivers a total of 1,100 lumens in a spot pattern (SP1100L).

The typical life of the LED is 10 years. The LED light sources typically never need to be replaced under normal conditions for normal applications.

CCT: 5000K

**ELECTRICAL** — Orderable in multiple voltages (see ordering tree for specific voltages).

Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery charges certified in the CA Title 20 Appliance Efficiency Database.

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts.

Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages.

Prevents overcharging that shortens battery life and reduces capacity. Filtered charger input minimizes charge voltage ripple and extends battery life.

**BATTERY** — Sealed, maintenance-free nickel-cadmium (ELM6L only) or Lithium Iron Phosphate battery. Optional High-Output (HO) option and Extra High Output (EHO) option, LFP battery type only, provides a wide variety of remote capacities and/or extended run times.

Automatic 24-hour recharge after a 90-minute discharge.

Advanced electrical design provides constant light output throughout the entire discharge period.

Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 80 percent nominal (120, 220, 277 or 347. Other input voltages may vary).

AC/DC reset allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Self-Diagnostics: Continuously monitors AC functionality. Test switch and remote tester (RTK) accessory provide manual activation of 30-second diagnostic testing for on-demand visual inspection. Standard derangement monitoring will indicate disconnected battery, charge failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state charging.

Self-Diagnostics and Remote Tester (RTK) and AEL options.

Self-diagnostic testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of lamps, AC to DC transfer, battery charging and condition of microprocessor. Automatic test is easily postponed for eight hours by activating manual test switch or use of remote tester (RTK) accessory.

**AEL Option:** T3M (Self-Testing Automated Reporting) main monitors monthly and annual test results and diagnostics. Information for automated reporting requirements.

For more information visit [www.aaculight.com/378](http://www.aaculight.com/378)

**INSTALLATION** — Wall and ceiling mount standard. Blind-mount connector ensures easy installation and safe maintenance. 1/8" entrance provision at top of unit for standard 1/2" conduit entry. Tool-less removal of front cover from back-plate for ease of installation and maintenance.

**LISTINGS** — UL damp location listed standard and wet location listed when used with the WPPVS accessory. All 50-104°F (10-40°C). Meets or exceeds all applicable requirements for UL 924, NFPA 101 (Current Life Safety Code), NFPA 70 (NEC, NFPA 70E, NFPA 70E Annex D), California Energy Commission Title 20 section 1605.3 (W/E), ICC Title 47, Part 15, Subpart B and OSHA. List and labeled to comply with Canadian Standards C22.76, 141-10.

**BUY AMERICAN ACT** — Product with the BAA option is assembled in the USA and meets the Buy American(s) government procurement requirements under FAR, DFARS and DOT regulations.

Please refer to [www.aaculight.com/378](http://www.aaculight.com/378) for additional information.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind, either express or implied warranties are disclaimed.

Complete warranty terms located at: [www.aaculight.com/warranty/terms-and-conditions](http://www.aaculight.com/warranty/terms-and-conditions)

**NOTE:** Actual performance may differ as a result of end-use environment and application.

All values are design or typical values, measured under laboratory conditions at 25°C.

Specifications subject to change without notice.

1 Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit [www.aaculight.com/designselect](http://www.aaculight.com/designselect).

\*See ordering tree for details.

Catalog Number	
Notes	
Type	Z



### Contemporary Commercial LED Emergency Light



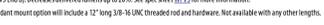
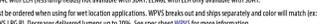
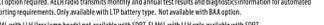
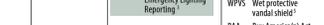
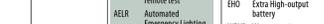
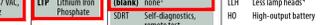
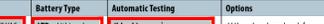
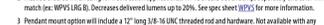
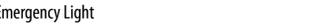
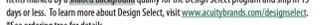
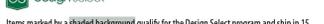
### ELM6L 1100 Lumens

LITHIUM IRON PHOSPHATE BATTERY NICKEL CADMIUM

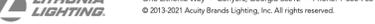
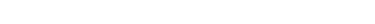
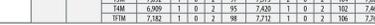
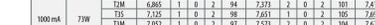
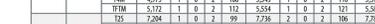
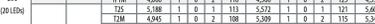
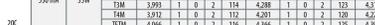
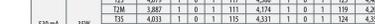
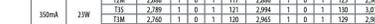
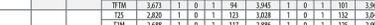
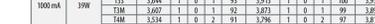
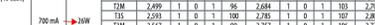
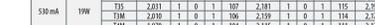
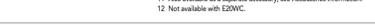
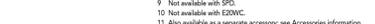
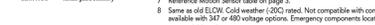
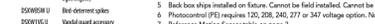
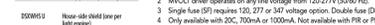
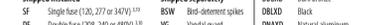
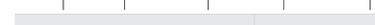
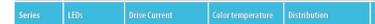
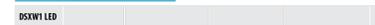
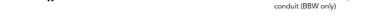
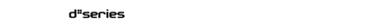


### MOUNTING

All dimensions are inches (centimeters) unless otherwise indicated.



### D-Series Size 1 LED Wall Luminaire



Catalog Number	
Notes	
Type	WF

Buy American

For the Tab key or mouse over the page to see all interactive elements.

### Introduction

The D-Series Wall Luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

### Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTDX

### DSXW1 LED

Series	LEDs	Drive Current	Color Temperature	Distribution	Voltage	Shipping included	Control Options
DSXW1 LED	10 LEDs (10x10)	350 350mA	30K 3000K	T2Z Type II Short Throw	120V	MVOLT <sup>1</sup>	Control Options
	10 LEDs (10x10)	350 350mA	4000K	T3M Type II Medium Throw	120V		
	10 LEDs (10x10)	350 350mA	5000K	T3S Type III Short Throw	208V		
	10 LEDs (10x10)	350 350mA	5000K	T3M Type II Medium Throw	240V		
	10 LEDs (10x10)	350 350mA	5000K	T4M Type III Medium Throw	277V		
	10 LEDs (10x10)	350 350mA	5000K	T4M Type III Medium Throw	347V		
	10 LEDs (10x10)	350 350mA	5000K	T4M Type III Medium Throw	480V		

### Accessories

Other Options:

Shipped separately:

DSXW1 LED

DSXW1 LED

DSXW1 LED

DSXW1 LED

DSXW1 LED

DSXW1 LED

DSXW1 LED

DSXW1 LED

DSXW1 LED

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DSXW1 LED

DSXW1 LED

DSXW1 LED

TAG	SYMBOL	WATT	DESCRIPTION	LAMP - TYPE AND QUANTITY	MOUNTING	MANUFACTURER AND MODEL NUMBER	REMARKS
	</						

LIGHTING FIXTURE SCHEDULE							
TAG	SYMBOL	WATT	DESCRIPTION	LAMP - TYPE AND QUANTITY	MOUNTING	MANUFACTURER AND MODEL NUMBER	REMARKS
X		3	LED EXIT SIGN WITH DIECAST ALUMINUM BODY, STENCIL CUT LETTERS, GREEN LETTERING.	LED ARRAY	SURFACE WALL	LITHONIA LES 1.2 G 120 VOLTS, ELM WITH 90 MINUTE BATTERY	120 VOLTS, ELN
Z			EM LIGHT	LED	WALL	LITHONIA EML6	90 MINUTE BATTERY
WF			AREA FLOOD	LED	WALL	LITHONIA DSX1	

DEVICE/CONTROL LEGEND	
TAG	DESCRIPTION
CS	CAT 5 CABLE PROVIDE RACEWAY AS REQUIRED
0-10	0-10 WIRING - PURPLE & GRAY FOR LED DIMMING
D1	RLIGHT ON/OFF RAISE LOWER #PDM4FXWH
D4	RLIGHT DIMMER 4 CHANNEL TOGGLE WITH DIMMING #PDM4FXWH
PP1	RLIGHT POWER PACK #PP16D

**EXISTING EXIT SIGNS TO REMAIN**

**ALL WORK SHOWN IS NEW U.O.N.**

**SHEET NOTES:**

- CONTRACTOR SHALL VERIFY LOCATION, CEILING TYPE, TRIM, AND REQUIREMENTS OF ALL LIGHT FIXTURES AND CONTROL PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH INSTALLATION.
- CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
- 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED OR STEEL MC.
- ALL EXIT SIGNS ARE +12" TO CENTER LINE OF FIXTURE ABOVE DOOR FRAME UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE ALL BACKING, BRACKETS, SUPPORTS, AND MOUNTING HARDWARE NECESSARY TO PROPERLY INSTALL LIGHTING FIXTURES.
- VERIFY THE EXACT ROUTING OF ALL EXPOSED CONDUIT WITH OWNER PRIOR TO INSTALLATION.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING SYSTEM CONDUITS.

**KEY NOTES:**

- CONNECT TO EXISTING CONSTANT HOT LIGHTING CIRCUIT, CONTRACTOR TO EXTEND AS REQUIRED.
- NEW EM LIGHT (Z) - 1
- RELOCATED FIXTURE
- REPLACE EXISTING EXTERIOR FIXTURE WITH NEW WF FIXTURE, CONNECT TO EXISTING CIRCUIT.



7075 CAMPUS RD  
MOORPARK, CA 93021  
TEL: (805) 378 - 1400

**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

7075 CAMPUS RD.  
MOORPARK, CA 93021

COMMISSIONED ARCHITECT



28328 AGUIRA RD, 203 | AGUIRA HILLS CA, 91301 | 805-588-4334  
 CONSULTANT  
**LUCCI & ASSOCIATES INC.**  
 CONSULTING ELECTRICAL ENGINEERS  
 3251 CORTE MALPASO, #511  
 CAMARILLO, CA 93012-8094  
 (805) 389-6520 FAX (805) 389-6519  
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CONSTRUCTION DRAWINGS 31 JULY 2024

**LIGHTING PLAN PORTABLE CLASSROOM M1 & M3**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
 DRAWN: Author CHECKED: Checker

**E301**

DATE: 7/31/24 SHEET: OF

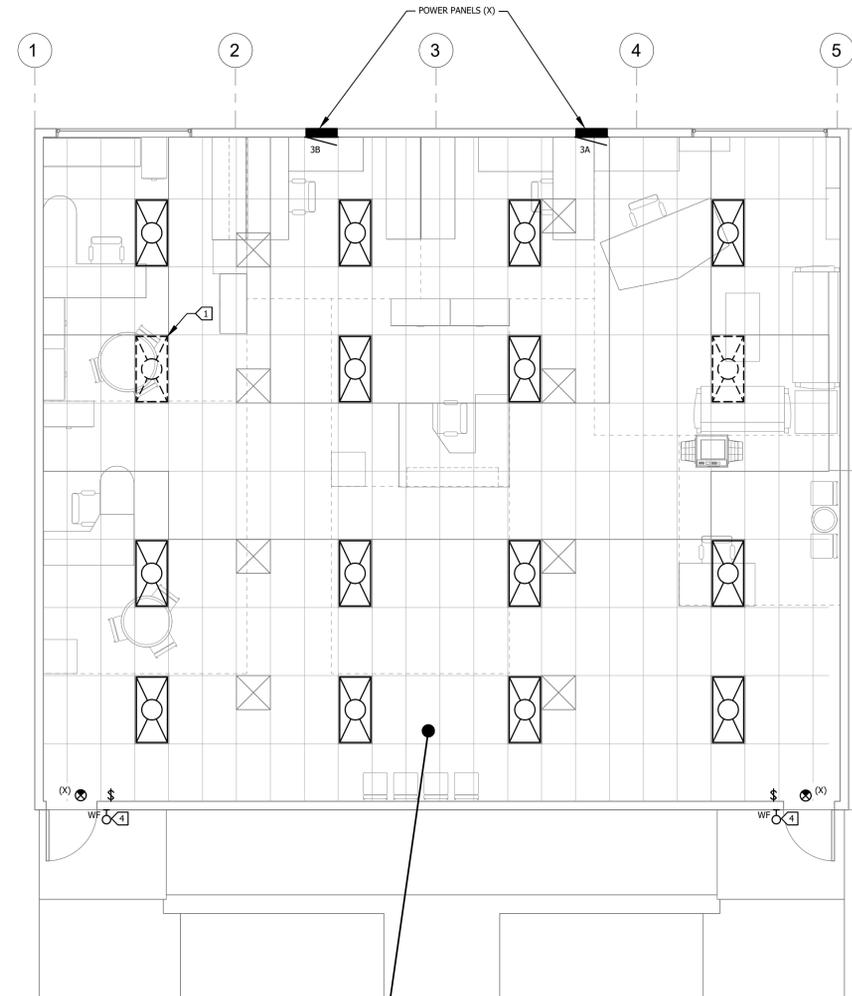
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DATE: 8 October 2024

PATHNAME: G:\24819\EL\Sheets\02-MODULAR BUILDINGS

DRAWING FILENAME: 24-819E301

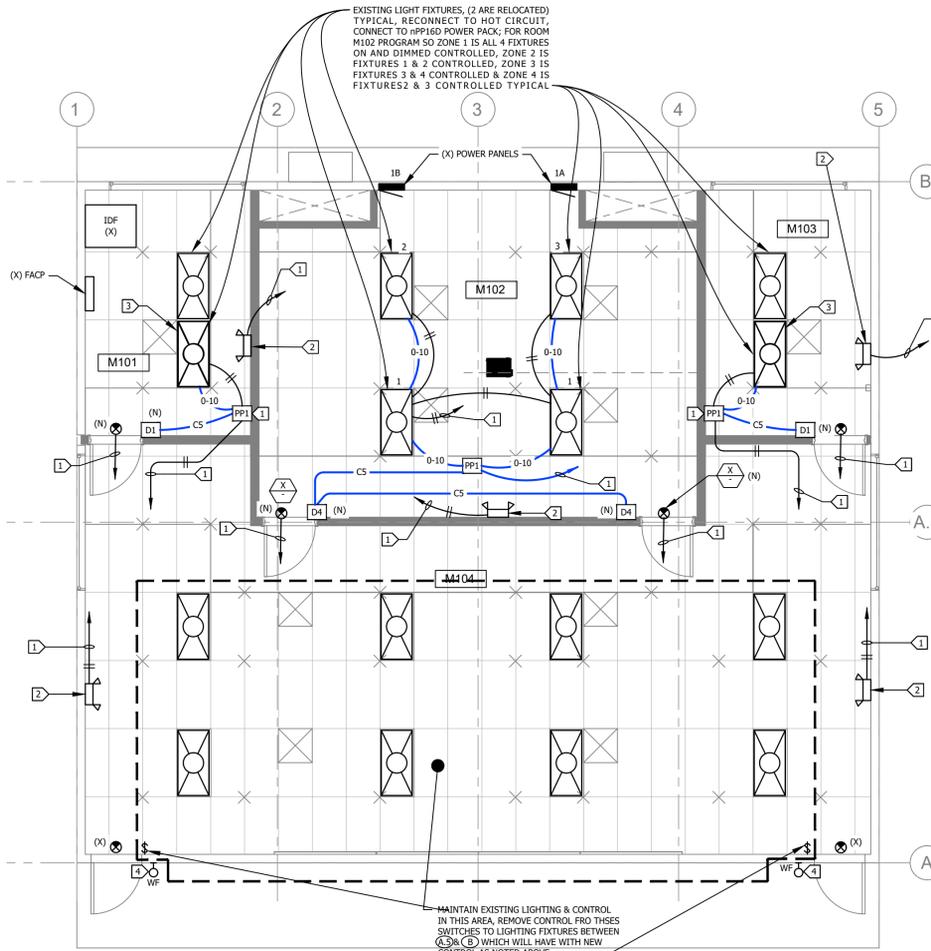
DRAFTER: CM02



**NO CHANGES TO INTERIOR LIGHTING SYSTEM**

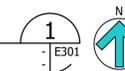
SCALE: 1/8"=1'-0"  
 SCALE: 1/4"=1'-0"

**LIGHTING PLAN PORTABLE CLASSROOM M3**



SCALE: 1/8"=1'-0"  
 SCALE: 1/4"=1'-0"

**LIGHTING PLAN PORTABLE CLASSROOM M1**



DATE: 8 October 2024

TIME: 12:25 pm

PATHNAME: G:\24\819\EL\Sheets\02-MODULAR BUILDINGS

DRAWING FILENAME: 24-819E-01

DRAFTER: CM02

REVISED PANEL																							
PANEL NUMBER		1A		VOLTAGE		120/240		PHASE		1 WIRE		3											
SOURCE		DB		A.I.C.		10KAIC		NEMA 1		COPPER BUSS		MAIN CIRCUIT BREAKER 100											
PANEL LOCATION		MODULAR #1		BUS AMPERE RATING		125		FLUSH MOUNTING															
L	C	F	CIRCUIT DESCRIPTION	LOAD(VA)		BRKR POLE	AMP	OKT	PHASE	A	B	BRKR POLE	AMP	OKT	PHASE	A	B	CIRCUIT DESCRIPTION	M	N	L	C	
				A	B																		A
			HVAC	5280		2	70	1	1			2	20	1	800			LIGHTS					
			EXTERIOR LIGHTS	80		1	20	5				4	20	1	900			RECEPT.					
			WP/GFCI RECEPT.	180		1	20	7				6	20	1	22			EXIT LIGHTS					
			SPARE			1	20	9				8	20	1	180			RECEPT.					
			SPARE			1	20	11				10	20	1	180			PROJECTOR					
			SPARE			1	20	13				12	20	1	360			RECEPTACLE					
			SPARE			1	20	15				14	20	1	360			RECEPTACLE					
			SPARE			1	20	17				16	20	1	360			RECEPTACLE					
			SPARE			1	20	19				18	20	1	360			RECEPTACLE					
			TOTALS	5540	5640							20	20	1	360			TOTALS					
L.C.L. VOLT AMPS:				PHASE A				PHASE B															
TOTAL VOLT AMPS:				15062				7262				7800											
TOTAL AMPS:				63				61				65											

EXISTING PANEL																							
PANEL NUMBER		1A		VOLTAGE		120/240		PHASE		1 WIRE		3											
SOURCE		DB		A.I.C.		10KAIC		NEMA 1		COPPER BUSS		MAIN CIRCUIT BREAKER 100											
PANEL LOCATION		MODULAR #1		BUS AMPERE RATING		125		FLUSH MOUNTING															
L	C	F	CIRCUIT DESCRIPTION	LOAD(VA)		BRKR POLE	AMP	OKT	PHASE	A	B	BRKR POLE	AMP	OKT	PHASE	A	B	CIRCUIT DESCRIPTION	M	N	L	C	
				A	B																		A
			HVAC	5280		2	70	1	1			2	20	1	800			LIGHTS					
			EXTERIOR LIGHTS	80		1	20	5				4	20	1	900			RECEPT.					
			WP/GFCI RECEPT.	180		1	20	7				6	20	1	22			EXIT LIGHTS					
			SPACE			1	20	9				8	20	1	180			RECEPT.					
			SPACE			1	20	11				10	20	1	180			PROJECTOR					
			SPACE			1	20	13				12	20	1	360			RECEPTACLE					
			SPACE			1	20	15				14	20	1	360			RECEPTACLE					
			SPACE			1	20	17				16	20	1	360			RECEPTACLE					
			SPACE			1	20	19				18	20	1	360			RECEPTACLE					
			TOTALS	5540	5640							20	20	1	1002			TOTALS					
L.C.L. VOLT AMPS:				PHASE A				PHASE B															
TOTAL VOLT AMPS:				13622				6542				7080											
TOTAL AMPS:				57				55				59											

SHEET NOTES:

- CONTRACTOR SHALL VERIFY LOCATION AND REQUIREMENTS OF ALL DEVICES PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH INSTALLATION.
- 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED, 1" MINIMUM UNDERGROUND.

KEY NOTES:

- EXISTING WALL MOUNTED IDF RACK.
- EXISTING FIRE ALARM EDWARDS E3 PANEL AND BATTERIES.
- FOR FIRE ALARM DEVICES SEE FA PLANS.
- 120VAC POWER TO CLOCK FROM 1B-2
- JACK ON WALL & HOME RUN TO IDF IN MODULAR 1. NO SPLICES & NO CONDUITS, 3/4" CONDUIT FROM BOX TO CEILING CAVITY; (N) IS NEW WORK. ROUTE TO IDF WITH 'J' HOOKS - ADD ADDITIONAL 24 PORT SWITCH IN IDF TO MATCH EXISTING MFG, COORDINATE WITH CAMPUS IT DEPARTMENT.
- MOVE TO OFFICE SIDE ON NEW WALL.
- CEILING WIFI, 2 CAT 6 TO IDF
- PER E403, PROVIDE FLOOR SURFACE RACEWAY WITH CONDUCTORS/CABLING FROM POC TO RECEPTACLES/JACKS (COM)
- DOUBLE DUPLEX RECEPTACLE & 2 CAT6 TERMINATED JACKS.
- COM & POWER DROP INTO FLOOR SURFACE RACEWAY (8) FROM WALL BOXES.
- 2 CAT 6 TO IDF.

REVISED PANEL																							
PANEL NUMBER		1B		VOLTAGE		120/240		PHASE		1 WIRE		3											
SOURCE		DB		A.I.C.		10KAIC		NEMA 1		COPPER BUSS		MAIN CIRCUIT BREAKER 100											
PANEL LOCATION		MODULAR #1		BUS AMPERE RATING		125		FLUSH MOUNTING															
L	C	F	CIRCUIT DESCRIPTION	LOAD(VA)		BRKR POLE	AMP	OKT	PHASE	A	B	BRKR POLE	AMP	OKT	PHASE	A	B	CIRCUIT DESCRIPTION	M	N	L	C	
				A	B																		A
			HVAC	5280		2	70	1	1			2	20	1	1260			RECEPT.					
			RECEPT.	180		1	20	5				4	20	1	180			WP/GFCI RECEPT.					
			RECEPT.	180		1	20	7				6	20	1	180			RECEPT.					
			RECEPT.	180		1	20	9				8	20	1	180			RECEPT.					
			RECEPT.	180		1	20	11				10	20	1	180			F/A					
			IDF	360		1	20	13				12	20	1	360			PROJECTOR					
			SPARE			1	20	15				14	20	1	360			RECEPT.					
			SPARE			1	20	17				16	20	1	360			RECEPT.					
			SPARE			1	20	19				18	20	1	360			RECEPT.					
			TOTALS	6000	5640							20	20	1	2340			TOTALS					
L.C.L. VOLT AMPS:				PHASE A				PHASE B															
TOTAL VOLT AMPS:				15240				8340				6900											
TOTAL AMPS:				64				70				58											

EXISTING PANEL																							
PANEL NUMBER		1B		VOLTAGE		120/240		PHASE		1 WIRE		3											
SOURCE		DB		A.I.C.		10KAIC		NEMA 1		COPPER BUSS		MAIN CIRCUIT BREAKER 100											
PANEL LOCATION		MODULAR #1		BUS AMPERE RATING		125		FLUSH MOUNTING															
L	C	F	CIRCUIT DESCRIPTION	LOAD(VA)		BRKR POLE	AMP	OKT	PHASE	A	B	BRKR POLE	AMP	OKT	PHASE	A	B	CIRCUIT DESCRIPTION	M	N	L	C	
				A	B																		A
			HVAC	5280		2	70	1	1			2	20	1	1260			RECEPT.					
			RECEPT.	180		1	20	5				4	20	1	180			WP/GFCI RECEPT.					
			RECEPT.	180		1	20	7				6	20	1	180			RECEPT.					
			RECEPT.	180		1	20	9				8	20	1	180			RECEPT.					
			RECEPT.	180		1	20	11				10	20	1	180			F/A					
			IDF	360		1	20	13				12	20	1	360			PROJECTOR					
			SPACE			1	20	15				14	20	1	360			RECEPT.					
			SPACE			1	20	17				16	20	1	360			RECEPT.					
			SPACE			1	20	19				18	20	1	360			RECEPT.					
			TOTALS	6000	5640							20	20	1	1980			TOTALS					
L.C.L. VOLT AMPS:				PHASE A				PHASE B															
TOTAL VOLT AMPS:				14160				7980				6180											
TOTAL AMPS:				59				67				52											



7075 CAMPUS RD  
MOORPARK, CA 93021  
TEL: (805) 378-1400

PROJECT TITLE AND SCHOOL LOCATION  
**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

7075 CAMPUS RD.  
MOORPARK, CA 93021



28328 AGOURA RD, 203 | AGOURA HILLS CA, 91001 | 905-508-4334  
amador white architects, inc.  
**LUCCI & ASSOCIATES INC.**  
CONSULTING ELECTRICAL ENGINEERS  
3261 CORTE MALPASO, #611  
CAMARILLO, CA 93012-8094  
(805) 389-6620 FAX (805) 389-6619



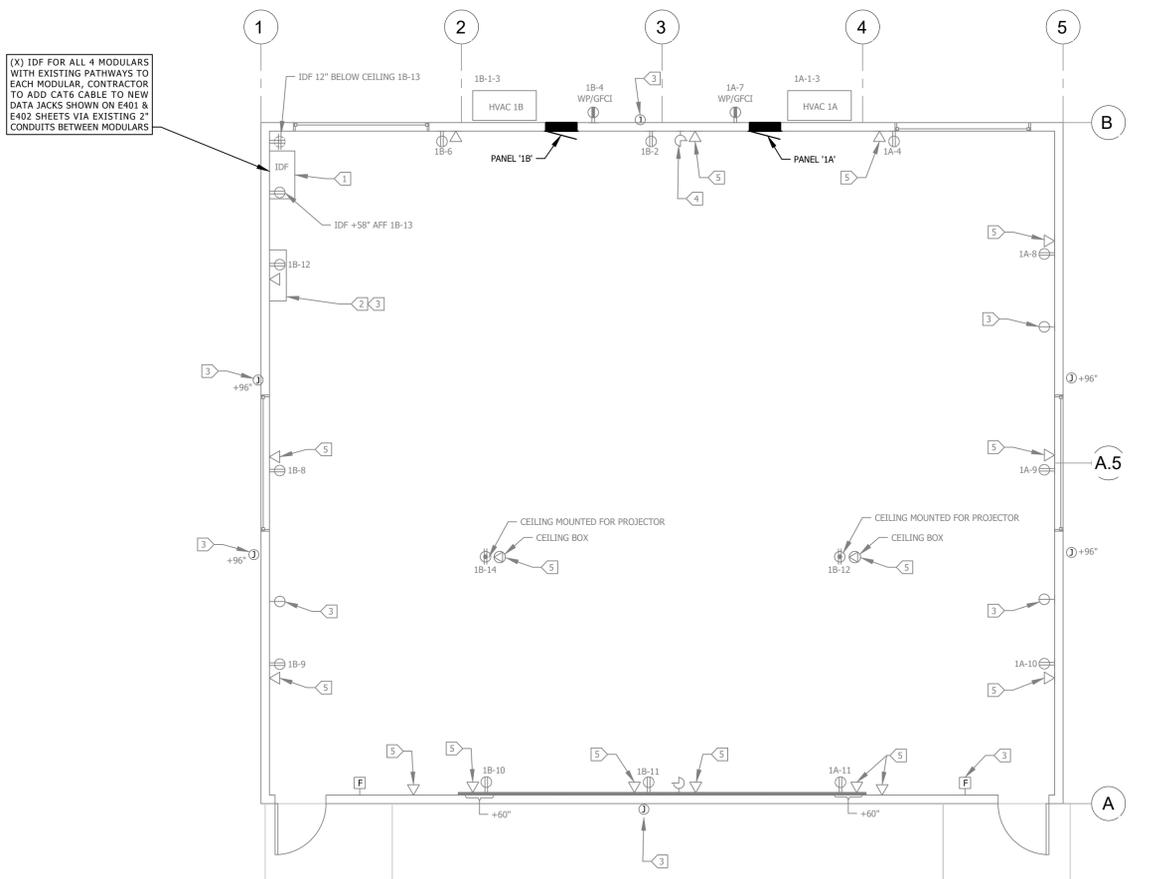
CONSTRUCTION DRAWINGS 31 JULY 2024

SHEET TITLE  
**POWER & COM PLAN PORTABLE CLASSROOM M1**

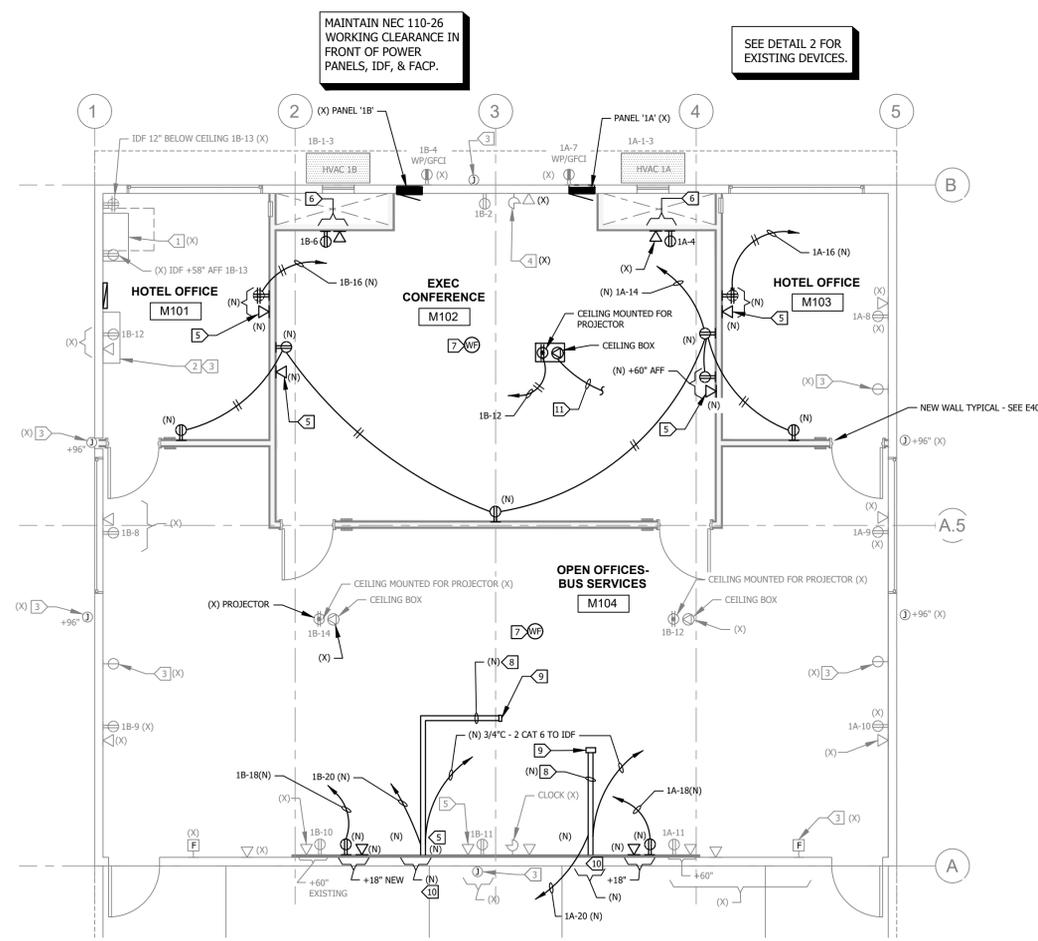
PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker

**E401**

DATE: 7/31/24 SHEET: OF



EXISTING POWER & COM PLAN PORTABLE CLASSROOM M1  
SCALE: 1/4"=1'-0" 2 E401



NEW POWER & COM PLAN PORTABLE CLASSROOM M1  
SCALE: 1/4"=1'-0" 1 E401

TIME: 12:25 pm

DATE: 8 October 2024

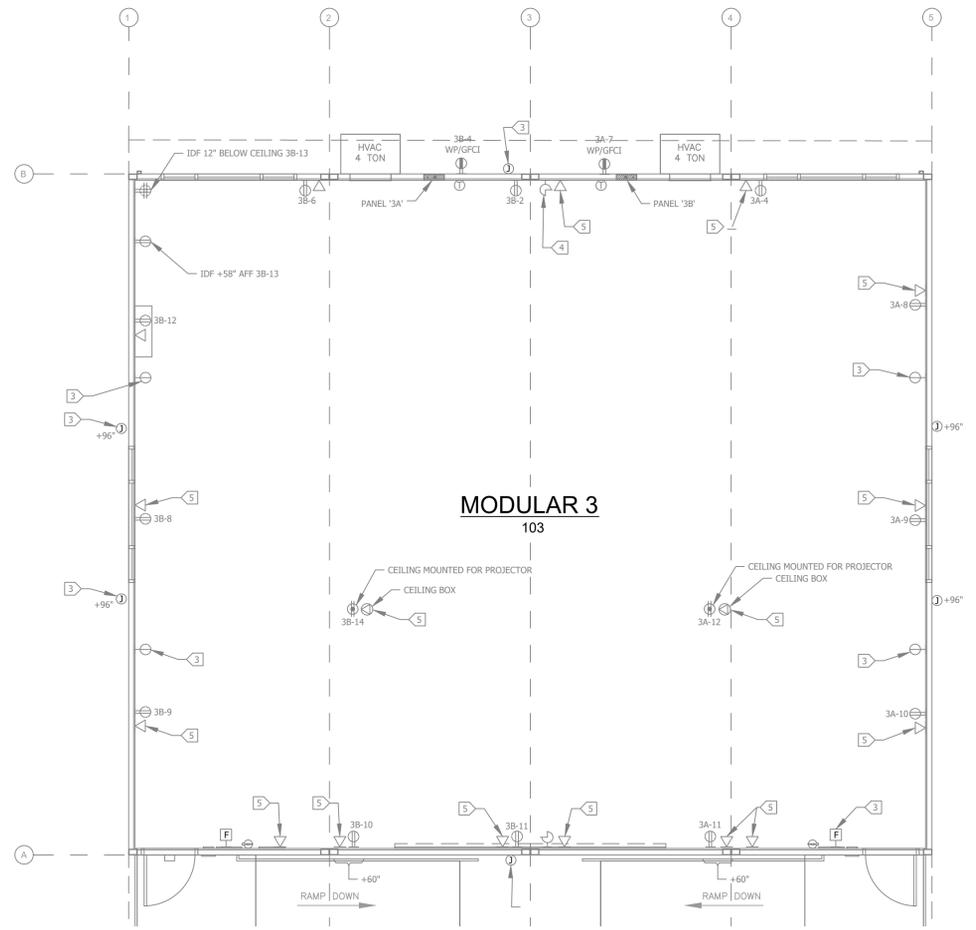
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DRAWING FILENAME: 24-819E-02

DRAFTER: CH02

REVISED PANEL													
PANEL NUMBER 3A		VOLTAGE 120/240		PHASE 1 WIRE 3		NEMA 1		COPPER BUSS					
SOURCE DB		A.I.C. 42KAIC		BUS AMPERE RATING 125		MAIN CIRCUIT BREAKER 100		FLUSH MOUNTING					
CIRCUIT DESCRIPTION	LOAD(VA)		BRKR AMP	POLE	CIRCUIT	PHASE	CIRCUIT	BRKR AMP	POLE	LOAD(VA)	CIRCUIT DESCRIPTION	M	L
	A	B											
HVAC	5280	5280	2	70	1	2	20	1	800	LIGHTS			
EXTERIOR LIGHTS	80	1	20	5	6	20	1	22	900	RECEPT.			
WP/GFCI	180	1	20	7	8	20	1	180	180	EXIT LIGHTS			
RECEPT.	180	1	20	9	10	20	1	180	180	RECEPT.			
SPARE	180	1	20	11	12	20	1	180	360	PROJECTOR			
					14	20	1	360	360	RECEPTACLE			
					16	20	1	360	360	RECEPTACLE			
					18	20	1	360	360	RECEPTACLE			
					20	20	1	19		SPARE			
TOTALS	5540	5640							1722	1800	TOTALS		
L.C.L. VOLT AMPS:	PHASE A		PHASE B										
TOTAL VOLT AMPS:	14702		7262		PHASE B		7440						
TOTAL AMPS:	61		61		PHASE B		62						

EXISTING PANEL													
PANEL NUMBER 3A		VOLTAGE 120/240		PHASE 1 WIRE 3		NEMA 1		COPPER BUSS					
SOURCE DB		A.I.C. 42KAIC		BUS AMPERE RATING 125		MAIN CIRCUIT BREAKER 100		FLUSH MOUNTING					
CIRCUIT DESCRIPTION	LOAD(VA)		BRKR AMP	POLE	CIRCUIT	PHASE	CIRCUIT	BRKR AMP	POLE	LOAD(VA)	CIRCUIT DESCRIPTION	M	L
	A	B											
HVAC	5280	5280	2	70	1	2	20	1	800	900	LIGHTS		
EXTERIOR LIGHTS	80	1	20	5	6	20	1	22	180	180	RECEPT.		
WP/GFCI	180	1	20	7	8	20	1	180	180	EXIT LIGHTS			
RECEPT.	180	1	20	9	10	20	1	180	180	RECEPT.			
SPACE	180	1	20	11	12	20	1	360	360	PROJECTOR			
					14	20	1			SPACE			
					15								
					16								
					17								
					18								
					19								
TOTALS	5540	5640							1002	1440	TOTALS		
L.C.L. VOLT AMPS:	PHASE A		PHASE B										
TOTAL VOLT AMPS:	13622		6542		PHASE B		7080						
TOTAL AMPS:	57		55		PHASE B		59						

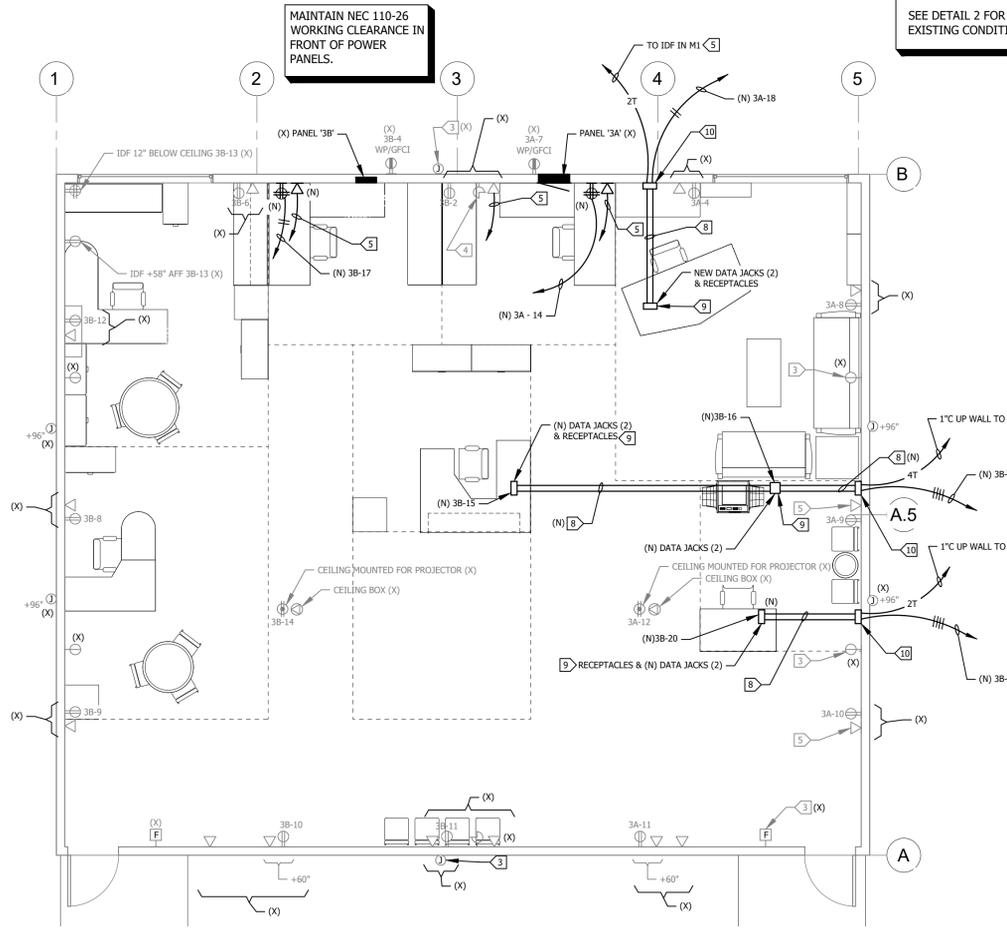


SCALE: 1/4"=1'-0"  
 EXISTING POWER & COM PLAN PORTABLE CLASSROOM M3  
 SCALE: 1/4"=1'-0"  
 2 E402

- SHEET NOTES:**
- CONTRACTOR SHALL VERIFY LOCATION AND REQUIREMENTS OF ALL DEVICES PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH INSTALLATION.
  - 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED, 1" C MINIMUM UNDERGROUND.
- KEY NOTES:**
- EXISTING WALL MOUNTED IDF RACK.
  - EXISTING FIRE ALARM EDWARDS E3 PANEL AND BATTERIES.
  - FOR FIRE ALARM DEVICES SEE FA PLANS.
  - 120VAC POWER TO CLOCK FROM 1B-2
  - JACK ON WALL & HOME RUN TO IDF IN MODULAR 1. NO SPLICES & NO CONDUITS, 3/4" CONDUIT FROM BOX TO CEILING CAVITY; (N) IS NEW WORK. ROUTE TO IDF WITH 'J' HOOKS - ADD ADDITIONAL 24 PORT SWITCH IN IDF TO MATCH EXISTING MFG, COORDINATE WITH CAMPUS IT DEPARTMENT.
  - NOT USED.
  - CEILING WIFI, 2 CAT 6 TO IDF
  - PER E403, PROVIDE FLOOR SURFACE RACEWAY WITH CONDUITS/CABLING FROM POC TO RECEPTACLES/JACKS (COM)
  - DOUBLE DUPLEX RECEPTACLE & 2 CAT6 TERMINATED JACKS.
  - COM & POWER DROP INTO FLOOR SURFACE RACEWAY (E) FROM WALL BOXES.

REVISED PANEL													
PANEL NUMBER 3B		VOLTAGE 120/240		PHASE 1 WIRE 3		NEMA 1		COPPER BUSS					
SOURCE DB		A.I.C. 42KAIC		BUS AMPERE RATING 125		MAIN CIRCUIT BREAKER 100		FLUSH MOUNTING					
CIRCUIT DESCRIPTION	LOAD(VA)		BRKR AMP	POLE	CIRCUIT	PHASE	CIRCUIT	BRKR AMP	POLE	LOAD(VA)	CIRCUIT DESCRIPTION	M	L
	A	B											
HVAC	5280	5280	2	70	1	2	20	1	1260	180	RECEPT.		
RECEPT.	180	1	20	5	6	20	1	180	180	WP/GFCI RECEPT.			
					8	20	1	180	180	RECEPT.			
					10	20	1	180	180	RECEPT.			
					12	20	1	180	180	F/A			
					14	20	1	360	360	PROJECTOR			
					16	20	1			SPACE			
					18	20	1						
					20	20	1						
TOTALS	6360	6000							1980	540	TOTALS		
L.C.L. VOLT AMPS:	PHASE A		PHASE B										
TOTAL VOLT AMPS:	14880		8340		PHASE B		6540						
TOTAL AMPS:	62		70		PHASE B		55						

EXISTING PANEL													
PANEL NUMBER 3B		VOLTAGE 120/240		PHASE 1 WIRE 3		NEMA 1		COPPER BUSS					
SOURCE DB		A.I.C. 42KAIC		BUS AMPERE RATING 125		MAIN CIRCUIT BREAKER 100		FLUSH MOUNTING					
CIRCUIT DESCRIPTION	LOAD(VA)		BRKR AMP	POLE	CIRCUIT	PHASE	CIRCUIT	BRKR AMP	POLE	LOAD(VA)	CIRCUIT DESCRIPTION	M	L
	A	B											
HVAC	5280	5280	2	70	1	2	20	1	1260	180	RECEPT.		
RECEPT.	180	1	20	5	6	20	1	180	180	WP/GFCI RECEPT.			
					8	20	1	180	180	RECEPT.			
					10	20	1	180	180	RECEPT.			
					12	20	1	180	180	F/A			
					14	20	1	360	360	PROJECTOR			
					16	20	1			SPACE			
					17								
					18								
					19								
TOTALS	6000	5640							1980	540	TOTALS		
L.C.L. VOLT AMPS:	PHASE A		PHASE B										
TOTAL VOLT AMPS:	14160		7980		PHASE B		6180						
TOTAL AMPS:	59		67		PHASE B		52						



SCALE: 1/4"=1'-0"  
 NEW POWER & COM PLAN PORTABLE CLASSROOM M3  
 SCALE: 1/4"=1'-0"  
 1 E402



7075 CAMPUS RD  
 MOORPARK, CA 93021  
 TEL: (805) 378-1400

**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

7075 CAMPUS RD.  
 MOORPARK, CA 93021

**AMADÒR**

28328 AGOURA RD, 203 | AGOURA HILLS CA, 91001 | 905-598-4334  
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 3261 COSTE MALPASO, #611  
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CONSTRUCTION DRAWINGS 31 JULY 2024

**POWER & COM PLAN PORTABLE CLASSROOM M3**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
 DRAWN: Author CHECKED: Checker

**E402**

DATE: 7/31/24 SHEET: OF

**legrand®** WIREMOLD®  
OFR Series Overfloor Raceway

OFR Series Overfloor Raceway Ordering Information

Catalog No./Item	Description/Specifications	Catalog No./Item	Description/Specifications
<b>OFR15</b> 1" (25mm) 11 3/8" (289mm) 9 27/32" (250mm)	<b>OFR Tee/Cross</b> – For branching OFR Series Raceway at right angles. Remove twistout on cover to make a cross. <b>Country of Origin: USA</b>	<b>OFR1</b> 1 3/8" (35mm) 2 1/2" (64mm)	<b>OFR Coupling</b> – Joins lengths of OFR-8 OFR Series Raceway Base together. Sold in pairs. <b>Country of Origin: Mexico</b>
<b>OFR48-2MRTC</b> 11 1/8" (283mm) 9 23/32" (247mm)	<b>OFR Transition Box</b> – Allows cords and cables to make a smooth conical transition to the underside of the table when used with the InteGreat™ Transition Channel (MRTC). <b>Country of Origin: USA</b>	<b>OFR9</b> 1 3/8" (35mm) 2 1/2" (64mm)	<b>OFR Grounding Clip</b> – Connects equipment grounding conductor to provide ground to OFR Series Raceway. No. 10 ground screw provided. <b>Country of Origin: USA</b>
<b>OFR17</b> 6 28/32" (175mm) 2 1/2" (64mm)	<b>OFR Inside Elbow</b> – For internal right angle turns of OFR Series Raceway. <b>Country of Origin: USA</b>	<b>OFR47-B</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Blank Device Plate</b> – For covering unused compartments in OFR48-2 and OFR48-4 Device Boxes. <b>Country of Origin: Mexico</b>
<b>OFRPT3</b> 12 3/16" (310mm) 7 1/16" (179mm) 12 15/16" (320mm)	<b>OFR 3 Inch Poke-Thru Transition</b> – For bringing power, A/V, and data through abandoned Poke-Thru openings to open spaces. Will replace any 3" poke-thru. <b>Country of Origin: USA</b>	<b>OFR47-D</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Duplex Device Plate</b> – For covering duplex style devices in OFR48-2 and OFR48-4 Device Boxes. Accepts 106 Frame. <b>Country of Origin: Mexico</b>
<b>OFRPT4</b> 12 3/16" (310mm) 7 1/16" (179mm) 9 7/16" (240mm)	<b>OFR 4 Inch Poke-Thru Transition</b> – For bringing power, A/V, and data through abandoned Poke-Thru openings to open spaces. Will replace any 4" poke-thru. <b>Country of Origin: USA</b>	<b>OFR47-R</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Decorator Device Plate</b> – For covering rectangular decorator style devices in OFR48-2 and OFR48-4 Device Boxes. <b>Country of Origin: Mexico</b>
		<b>OFR47-U</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Extron® MAAP Device Plate</b> – Device plate that will accept up to four (4) Extron® Electronics MAAP style plates in OFR48-2 and OFR48-4 Device Boxes. <b>Country of Origin: USA</b>

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**legrand®** WIREMOLD®  
OFR Series Overfloor Raceway

OFR Series Overfloor Raceway Ordering Information

Catalog No./Item	Description/Specifications	Catalog No./Item	Description/Specifications
<b>OFRB-8</b> 6 7/8" (175mm) 12 1/2" (318mm)	<b>Overfloor Raceway Base &amp; Cover</b> – Cover: 0.040" (1.0mm) steel. Base: 0.080" (2.0mm) aluminum. Durable black powder coat finish. Divided into four channels. Packed one (1) 8' (2.4m) length of base and cover per carton. <b>Country of Origin: USA</b> <b>NOTE:</b> Not recommended for use in high traffic areas.	<b>OFR10W</b> 9 15/32" (241mm) 7 23/32" (190mm) 5 7/16" (138mm) 3 1/4" (83mm) 5/32" (4mm) 9 15/32" (241mm)	<b>Overfloor Raceway In-Wall Entrance End Fitting</b> – Feeds OFR Series Overfloor Raceway from behind wall. Configurable to provide one or two channels of power. Has 1/2" trade size KO for single channel and 3/4" trade KO for two channel. <b>Country of Origin: Mexico</b>
<b>OFRB-8</b> 6 7/8" (175mm) 12 1/2" (318mm)	<b>Overfloor Raceway Base</b> – Base: 0.080" (2.0mm) aluminum. Divided into four channels. Packed four (4) 8' (2.4m) lengths per carton. <b>Country of Origin: USA</b> <b>NOTE:</b> Not recommended for use in high traffic areas.	<b>OFR10A</b> 4 1/2" (114mm) 2 5/8" (67mm) 6 15/16" (175mm) 2 1/2" (64mm)	<b>Overfloor Raceway Entrance End Fitting</b> – Feeds OFR Series Raceway. Has two (2) concentric 1/2" and 1 1/4" trade size KOs on end. Includes removable divider that can be positioned to feed any raceway channel. Can be used to feed raceway from wall or into furniture. <b>Country of Origin: Mexico</b>
<b>OFRB-8</b> 6 7/8" (175mm) 12 1/2" (318mm)	<b>Overfloor Raceway Cover</b> – Cover: 0.040" (1.0mm) steel. Durable black powder coat finish. Packed four (4) 8' (2.4m) lengths of cover per carton. <b>Country of Origin: USA</b> <b>NOTE:</b> Not recommended for use in high traffic areas.	<b>OFR48-2</b> 2 1/4" (61mm) 13" (330mm) 6 15/16" (175mm)	<b>Overfloor Raceway 2-Gang Box</b> – Divided two-gang device box. Allows multiple services (power, communication, A/V) at a single point-of-use. Side facing device mounting provides low profile, with space for large cable bend radius. Accepts OFR Series device plates. Removable divider can be aligned with any of the raceway channels. <b>Country of Origin: Mexico</b>
<b>OFR6</b> 16 3/32" (15.1mm) 7 5/32" (162mm) 1 1/2" (38mm)	<b>Overfloor Raceway Seam Clip</b> – Covers seam where two sections of OFR Series Overfloor Raceway cover come together. <b>Country of Origin: Mexico</b>	<b>OFR48-4</b> 2 1/4" (61mm) 13" (330mm) 6 15/16" (175mm) 12 1/2" (318mm)	<b>Overfloor Raceway 4-Gang Box</b> – Divided four-gang device box. Allows multiple services (power, communication, A/V) at a single point-of-use. Side facing device mounting provides low profile, with space for large cable bend radius. Accepts OFR Series device plates. Removable divider can be aligned with any of the raceway channels. <b>Country of Origin: Mexico</b>
<b>OFR10B</b> 12" (12.5mm) 3/4" (19.1mm)	<b>Overfloor Raceway Blank End Fitting</b> – Blank end fitting for OFR Series Raceway. <b>Country of Origin: USA</b>		

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**legrand®** WIREMOLD®  
OFR Series Overfloor Raceway

Multiple Services in a Low Profile Overfloor Raceway



OFR Series Raceway provides access to power, A/V, and communication services to open-space areas in an ADA compliant design.

OFR Series Overfloor Raceway System provides four-channels of capacity and access to a wide range of power, communications, and A/V connectivity options in the smallest, lowest, narrowest, ADA compliant profile available in overfloor raceway systems. This system installs over existing floor coverings and is both tamper-resistant and installer-friendly, making it an ideal solution for relocatable or permanent installations where access through floors and ceilings is not an option. There are also transition fittings to feed OFR Series Raceway from Wiremold wall-mounted raceway systems and Vista Architectural Columns. OFR Series Raceway accepts Wiremold Open System device plates that provide connectivity to a wide range of devices from leading communication and A/V providers.

Features & Benefits

- **Lowest profile overfloor raceway available.** Smaller, narrower, lower raceway profile reduces potential trip hazards while also being installer friendly to speed installations.
- **Installs in open space areas.** Provides power, communication, and A/V wiring to areas where in-floor or ceiling distribution are not accessible options.
- **Multiple channel base.** Four-channel raceway provides space for multiple combinations of power, communication and A/V to be provided through a single raceway installation.
- **Black powder coat finish.** Durable textured finish resists scuffing and scratches and blends with most decors.
- **Multiple options for communication and A/V connectivity.** OFR Series Raceway accepts Wiremold Open System device plates that provide connectivity to a wide range of devices from leading communication and A/V providers.
- **Re-energize abandoned poke-thru holes.** Brings a wide variety of services to the work surface by re-using existing openings from previous poke-thru installations.
- **Attaches directly to floor covering.** Works with carpet, tile, wood, etc. so there is no need to remove or alter existing floor coverings. Ideal for both temporary and permanent installations.
- **Multiple transition options.** Transition fittings are available to feed OFR Series Raceway from Wiremold DS4000™, 4000™, and 2400 Series™ wall-mounted raceway systems and also from Vista Architectural Columns.
- **Tamper-resistant system.** Raceway cover is difficult to remove without the proper tools, discouraging unwanted access to raceway-provided services.
- **Meets ADA Accessibility Guidelines.** Low profile, unobtrusive design meets the ADA Accessibility Guidelines that pertain to ADA Standard 4.5 which addresses changes in floor and ground surface levels.

Vertical Markets

- Healthcare
- Commercial
- Hospitality
- Education
- Entertainment
- Retail

Compliance

eTUs Listed.

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**legrand®** WIREMOLD®  
OFR Series Overfloor Raceway

OFR Series Overfloor Raceway Ordering Information

Catalog No./Item	Description/Specifications	Catalog No./Item	Description/Specifications
<b>OFR47-V</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Extron, AAP Device Plate</b> – Device plate that will accept two (2) Extron, Electronics AAP single space modules. <b>Country of Origin: USA</b>	<b>OFR47-U2A</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Extron, MAAP-2A Combo Device Plate</b> – Combination device plate that will accept up to two (2) Extron, Electronics MAAP style plates and up to two (2) ports of communications devices. Includes adapters for Ortronics® TracJack, Series II, Pass & Seymour® Activate inserts and Wiremold Open System communication modules. <b>Country of Origin: USA</b>
<b>OFR47-2A</b> 2" (51mm) 5 1/2" (140mm)	<b>OFR Communications Device Plate</b> – Device plate that will accept up to four (4) ports of communications devices. Includes adapters for Ortronics® TracJack, Series II, Pass & Seymour® Activate inserts and Wiremold Open System communication modules. <b>Country of Origin: Mexico</b>		
<b>OFR89-2400</b> 7 3/16" (183mm) 10 1/2" (267mm) 3 1/4" (83mm)	<b>OFR 2400 Raceway Transition</b> – For connecting vertical runs of 2400 & 2400D Series Raceway with OFR Series Raceway. Includes removable divider that can be positioned to feed any raceway channel. <b>Country of Origin: USA</b>	<b>OFR89-4000</b> 7 3/16" (183mm) 10 1/2" (267mm) 4 7/8" (124mm) 3 15/16" (100mm)	<b>OFR 4000 Raceway Transition</b> – For connecting vertical runs of 4000 Series Raceway with OFR Series Raceway. Includes removable divider that can be positioned to feed any raceway channel. <b>Country of Origin: USA</b>
<b>OFR89-DS4000</b> 7 3/16" (183mm) 10 1/2" (267mm) 4 7/8" (124mm) 3 15/16" (100mm)	<b>OFR DS4000 Raceway Transition</b> – For connecting vertical runs of DS4000 Series Raceway with OFR Series Raceway. Includes removable divider that can be positioned to feed any raceway channel. <b>Country of Origin: USA</b>		

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**legrand®** WIREMOLD®  
OFR Series Overfloor Raceway

OFR Series Overfloor Raceway Ordering Information

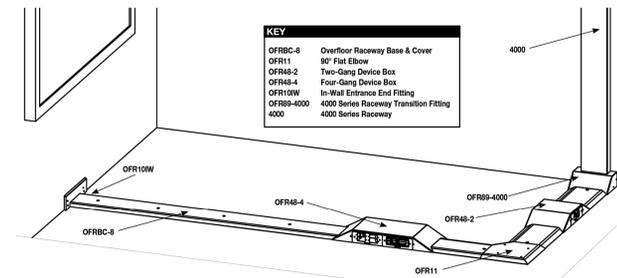
Catalog No./Item	Description/Specifications	Catalog No./Item	Description/Specifications
<b>OFR48-4GX</b> 6 3/4" (171mm) 12 1/2" (318mm)	<b>OFR Crossover Kit</b> – Allows access to power and communication on both sides of OFR48-4 4-Gang Device Box. <b>Country of Origin: USA</b>	<b>OFR89-VIS</b> 5 1/16" (126mm) 1/4" (6.4mm) 7 9/16" (192mm)	<b>OFR Vista Points Transition</b> – For connecting OFR Series Raceway to Vista Points Architectural Columns. <b>Country of Origin: USA</b>
<b>OFRWC</b> 1 13/32" (35mm) 3/8" (9.5mm) 3/4" (19.1mm)	<b>Overfloor Raceway Wire Clips</b> – For holding conductors in place. Packed twelve (12) per pack. <b>Country of Origin: Mexico</b>	<b>OFR89-VFL</b> 6 3/32" (162mm) 8 1/16" (202mm) 5 31/32" (228mm) 5 1/2" (140mm)	<b>OFR Large Vista Transition</b> – For connecting OFR Series Raceway to Vista Architectural Columns. <b>Country of Origin: USA</b>
<b>OFR11</b> 8 11/16" (221mm) 1/2" (12.7mm)	<b>OFR Flat Elbow</b> – For making right angle turns on the same surface. <b>Country of Origin: USA</b>	<b>OFR12</b> 8 11/16" (221mm) 8 1/16" (206mm)	<b>OFR 45° Flat Elbow</b> – For making diagonal 45° turns on the same surface.

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**legrand®** WIREMOLD®  
OFR Series Overfloor Raceway

OFR Series Overfloor Raceway System Layout



For additional information refer to Technical Section of Wiremold Product Guide.

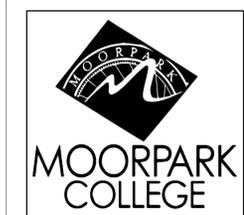
OFR Series Overfloor Raceway Wire Fill Capacities for Power*						
WIRE SIZE THHN/THWN	Inches	O.D. (mm)	WIRE CROSS-SECTIONAL AREA	# OF WIRES PER OUTER CHANNEL (40% FILL)	# OF WIRES PER OUTER CHANNEL (60% FILL)	# OF WIRES PER INNER CHANNEL (40% FILL)
14 AWG	0.111	(2.8)	0.010	18	13	10
12 AWG	0.130	(3.3)	0.013	13	10	7
10 AWG	0.164	(4.2)	0.021	8	6	5
8 AWG	0.216	(5.5)	0.037	4	3	2

OFR Series Overfloor Raceway Wire Fill Capacities for Communications						
	CABLE/WIRE SIZE	O.D. (APPROX DIA) INCHES	WIRE CROSS-SECTIONAL AREA	# OF CABLES PER OUTER CHANNEL (40% FILL)	# OF CABLES PER OUTER CHANNEL (60% FILL)	# OF CABLES PER INNER CHANNEL (40% FILL)
UNSHIELDED TWISTED PAIR	4-Pair, 24 AWG, Cat 3	0.190	(4.8)	0.028	6	4
	4-Pair, 24 AWG, Cat 5e	0.210	(5.3)	0.035	5	3
	4-Pair, 24 AWG, Cat 6	0.250	(6.4)	0.049	2	2
	4-Pair, 24 AWG, Cat 6a	0.354	(9.0)	0.098	1	1
COAXIAL	RG6/U	0.270	(6.9)	0.057	3	2
	ZipCord	0.118 x 0.236	(3 x 6)	0.025	7	5
	Round 4-Strand Fiber	0.187	(4.7)	0.027	6	4
FIBER	Round 6-Strand Fiber	0.256	(6.5)	0.051	3	2



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PROJECT TITLE AND SCHOOL LOCATION  
**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

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CONSTRUCTION DRAWINGS 31 JULY 2024

SHEET TITLE

**WIREMOLD RACEWAY DATA SHEETS**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker

**E403**

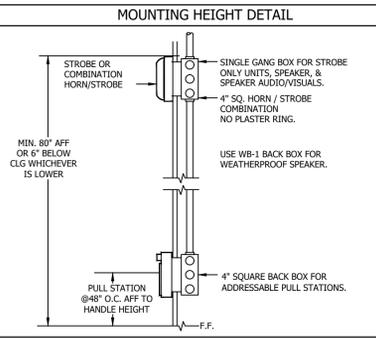
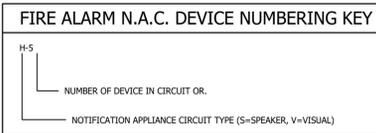
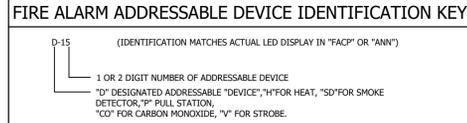
DATE: 7/31/24 SHEET: OF

DEVICE LEGEND					
SYMBOL	MODEL	MAKE	DESCRIPTION	CSFM #	MOUNTING
[FACP]	EST3	EST	-NEW MAIN FIRE ALARM CONTROL PANEL	7165-1657:0186	-WALLBOX PROVIDED
	3-CAB14B	EST	-ENCLOSURE	7165-1657:0186	-MOUNTS TO WALL
	3-CAB14D	EST	-DOOR ASSEMBLY FOR 3-CAB7	7165-1657:0186	-MOUNTS ON 3-CAB7B
	3-CHA57	EST	-CHASSIS ASSEMBLY FOR 7 LRMS	7165-1657:0186	-1 CHASSIS SPACE IN WALLBOX
	3-CPJ3	EST	-CENTRAL PROCESSING UNIT	7165-1657:0186	-MOUNTS ON RAIL
	3-LCD	EST	-CPU LCD DISPLAY	7165-1657:0186	-MOUNTS ON RAIL
	3-RS485B	EST	-NETWORK COMMUNICATION CARD	7165-1657:0186	-MOUNTS ON RAIL
	3-DACT-E3	EST	-DIGITAL ALARM COMMUNICATOR	7165-1657:0186	-MOUNTS ON RAIL
	3-SSDC1	EST	-SINGLE SIGNATURE DRIVER CONTROLLER	7165-1657:0186	-MOUNTS ON RAIL
	3-LRMF	EST	-BLANK LRM FILLER	N/A	-MOUNTS ON RAIL
	3-PPS/M	EST	-PRIMARY POWER SUPPLY	7165-1657:0186	-MOUNTS IN WALLBOX SEE RISER
	SLA1116	POWER PATROL	-7.0 AH BATTERY	N/A	-MOUNTS IN WALLBOX MINIMUM 2/21 MANUFACTURER DATE STAMP
	3-ASU4	EST	-AUDIO SOURCE UNIT	7165-1657:0186	-MOUNTS ON RAIL
	3-ZA20B	EST	-20 WATTS ZONE AMPLIFIER	7165-1657:0186	-MOUNTS ON RAIL
	3-INI-VG	EST	-VOICE GATEWAY	7165-1657:0186	-MOUNTS ON RAIL
3-INCC-C	EST	-VOICE EVAC COMMAND CENTER	7165-1657:0186	-MOUNTS ON RAIL	
[AMP]	EST	VOICE COMMUNICATION ACCESSORIES	6912-1657:0237	ANS50MD2	
[ADM]	EST	ACCESSIBLE RELAY MODULE			
[CD]	G4HFWF-S7VMC	EST	-SPEAKER/STROBE 15 CANDELA (W=WALL C=CEILING)	7320-1657:0211	-4" SQUARE BOX WITH SINGLE GANG RING
	G4HFWF-S7VMC	EST	-SPEAKER/STROBE 30 CANDELA (W=WALL C=CEILING)	7320-1657:0211	-4" SQUARE BOX WITH SINGLE GANG RING
[CD]	G4HFWF-S7VMC	EST	-SPEAKER/STROBE 75 CANDELA (W=WALL C=CEILING)	7320-1657:0211	-4" SQUARE BOX WITH SINGLE GANG RING
	G1-FVM	EST	-STROBE 15 CANDELA (W=WALL C=CEILING)	7125-1657:0218	-4" SQUARE BOX WITH SINGLE GANG RING
[CD]	G1-FVM	EST	-STROBE 30 CANDELA (W=WALL C=CEILING)	7125-1657:0218	-4" SQUARE BOX WITH SINGLE GANG RING
	WG4WF-SVMC	EST	-STROBE/SPEAKER - WP - WEATHER PROOF	7320-1567:0289	-4" SQ. BOX
[P]	SIGA-270	EST	-MANUAL PULL STATION	7150-1657:0129	-4" SQUARE BOX WITH SINGLE GANG RING SINGLE GANG RING OR OUTLET - BREAK GLASS TYPE (NOT ACKNOWLEDGE)
[SD]	SIGA-PD	EST	-SMOKE DETECTOR	7272-1657:0331	-MOUNTS TO SIGA-SB BASE
	SIGA-SB	EST	-BASE	7300-1657:0120	-4" SQ. BOX WITH 3" "O" RING
[HD]	SIGA-HRD	EST	-HEAT DETECTOR	7270-1657:0333	-MOUNTS TO SIGA-SB BASE
	SIGA-SB	EST	-BASE	7300-1657:0120	-4" SQ. BOX WITH 3" "O" RING
[SP]WP	WG4RF-S	EST	-25V SPEAKER - 2W	7320-1657:0289	-4" SQ. DEEP ELECTRICAL BOX (74347U (WG4) WEATHER PROOF BOX WET LOCATION)

WIRE LEGEND						
TYPE	CONDUCTORS	SIZE	TYPE CABLE	CIRCUIT DESCRIPTION	WIRE COLOR SCHEME	LISTING
Z	2	#18AWG	FPL	ADDRESSABLE DEVICE CIRCUIT	RED (+), BLACK (-)	UL AQ224 1424/581 WEST PENN
S	2	#12AWG	THHN	SPEAKER CIRCUIT	RED (+), BLACK (-)	UL 83
V	2	#14AWG	THHN	STROBE CIRCUIT	YELLOW (+), BLUE (-)	UL 83

SEQUENCE OF OPERATION										
DEVICE	ACTION	THROUGHOUT BUILDING SOUND GENERAL ALARM	SOUND TROUBLE BUZZER	ACTIVATE ADDRESSABLE MODULE FOR MONITORING	ANNUNCIATE AT PANEL	TRANSMIT TROUBLE SIGNAL FOR ALL APPLICABLE COMPONENTS TO SUPERVISING STATION	TRANSMIT ALARM SIGNAL TO SUPERVISING STATION	ACTIVATE REMOTE POWER SUPPLY PANEL (FCPS)	DROP SPEAKERS & VISUAL ALARMS FROM F.A. SYSTEM	HVAC SHUTDOWN
INDICATING CIRCUIT FAILURE										
INITIATING CIRCUIT FAILURE										
AC / BATTERY FAILURE										
F.A. SYSTEM LOW BATTERY										
SMOKE DETECTORS										
HEAT DETECTORS										
ISOLATOR LINE TROUBLE										
EARTH GROUND FAULT										
NOTIFICATION APPLIANCE CIRCUIT OPEN										
SIGNAL LINE SHORT										

PROJECT NOTES	
<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> <li>ALL WIRE SHALL BE IN CONDUIT PER CFC 907.</li> <li>MANUAL PULL STATIONS TO BE MOUNTED AT 48 IN. ABOVE FLOOR SURFACE TO THE CENTER OF THE STATION. (DETAIL 1)</li> <li>MOUNT AUDIO VISUAL 80 IN. ABOVE FINISHED FLOOR TO THE BOTTOM OF THE LIGHT OR 6" FROM BELOW CEILING WHICH EVER IS LOWEST. (DETAIL 2)</li> <li>MAINTAIN WIRING COLOR CODES.</li> <li>ALL WIRING TO BE AS CALLED FOR IN N.E.C. ARTICLE 760 &amp; CFC 907.</li> <li>IDENTIFY THE FIRE ALARM CIRCUIT AT THE ELECTRICAL PANEL IN RED. PROVIDE A BREAKER LOCKON DEVICE.</li> <li>DEVICE TYPES AND LOCATIONS ARE SHOWN AS CALLED FOR ON THE BID DOCUMENTS.</li> </ol>	
APPLICABLE CODES	
<p>LIST OF APPLICABLE CODES</p> <p>2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR</p> <p>2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR</p> <p>2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR</p> <p>2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR</p> <p>2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR</p> <p>2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR</p> <p>2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR</p>	<p>2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR</p> <p>2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR</p> <p>2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR</p> <p>TITLE 19 CUR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS</p> <p>APPLICABLE STANDARDS</p> <p>FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 25 AND CFC CHAPTER 80.</p>



**SCOPE OF WORK**

PROVIDE A NEW ADDRESSABLE EVALUATION FIRE ALARM SYSTEM FOR (4) FOUR NON SPRINKLERED MODULAR BUILDINGS. ALL BUILDINGS WILL BE CONNECTED TO ONE EST3 FACP AUTOMATIC TYPE COMPLETE BUILDING SYSTEM. A SPEAKER SYSTEM WILL BE EMPLOYED FOR VOICE NOTIFICATION. FA SYSTEM SHALL BE CONNECTED TO CAMPUS WIDE F.A. SYSTEM.

PROVIDE A STAND ALONE FIRE ALARM SYSTEM WITH EVACS TO ACCOMMODATE NEW MODULAR CLASSROOMS.

NEW FIRE ALARM SYSTEM WILL INCLUDE MANUAL AND AUTOMATIC DETECTION AND VOICE EVACUATION.

NEW FIRE ALARM SYSTEM WILL BE MONITORED BY A UL LISTED CENTRAL STATION PER CFC 907.6.6 AND UTILIZE ALTERNATE MEANS OF COMMUNICATIONS PER NFPA 72 CHAPTER 26

**FIRE ALARM ZONE SCHEDULE**

THE NEW FIRE ALARM SYSTEM IS A EST3 EDWARD ADDRESSABLE TYPE. EACH INITIATING DEVICE IS ANNUNCIATED AS A UNIQUE ADDRESS OR ZONE AT THE PANEL AND ANNUNCIATOR.

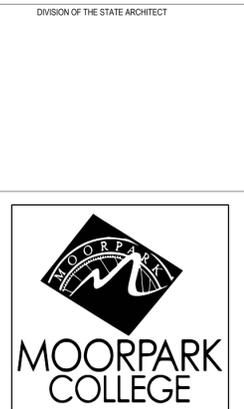
**F.A. RACEWAY SIZING (ALL CABLES IN CONDUIT)**

MINIMUM CONDUIT SIZE SHALL BE 3/4" DIAMETER AND SHALL NOT EXCEED 40% FILL.

THIS SHEET WAS USED FOR EXISTING TO NEW DESIGN. IT IS RECOMMENDED 'HCI' THE ORIGINAL FA SUBCONTRACTOR. BE RETAINED FOR THIS REMODEL.

SCOPE OF WORK IS ADDING A NEW HEAT AND SMOKE DETECTOR, A FEW NEW HORN STROBES, AND ANY NECESSARY PROGRAMING. DO NOT DISCONNECT THE EXISTING M1, M2, M3, & M4 FIRE ALARM SYSTEM DURING CONSTRUCTION OTHERWISE A FIRE WATCH WILL BE REQUIRED

- DSA REQUIRED NOTES**
- APPLICABLE STANDARD 2022 NFPA 72
  - INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAS BEEN APPROVED BY DSA.
  - UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
  - A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
  - ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
  - DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
  - ALL PENETRATIONS THROUGH RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER LAB TESTING CRITERIA. APPROVED TYPE OF MATERIALS SHALL BE IDENTIFIED WITHIN THE SPECIFICATION WITHIN THE FIRE ALARM SECTION.
  - WALL MOUNTED VISUAL NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
  - WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
  - AUDIBLE DEVICES TO BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 DBA AT 10 FEET OR MORE THAN 110 DBA AT THE MINIMUM HEARING DISTANCE. SOUND LEVEL SHALL BE MAINTAINED FOR DURATION OF AT LEAST 60 SECONDS 5 DBA MUST BE MAINTAINED.
  - AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
  - THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
  - VISUAL DEVICES SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A FLASHING LIGHT SOURCE NOT LESS THAN 15 CANDELA. VISUAL DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
  - UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATIONS.
  - ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE THIN OR THIN.
  - PER CFC STANDARDS. ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE IN UNDERGROUND LOCATIONS. THERE MUST BE AT LEAST 6' OF LEAD WIRE FROM THE BOX TO THE DEVICE. ALL BOXES TO BE SIZED PER CFC.
  - SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1" FROM FIRE SPRINKLERS OR 3" FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
  - ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A HEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
  - FIRE ALARM PANEL REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
  - A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE 'ON' POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
  - THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72, FIGURE 10.18.2.1.1.
  - CONTROL PANELS, REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48".
  - THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
  - SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
  - OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
  - THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRIC CODE.
  - INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY THE CALIFORNIA DEPT. OF THE STATE ARCHITECT'S FIRE MARSHAL.
  - UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM A SATISFACTORY TEST OF THE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE FIRE MARSHAL, OWNER AND ENGINEER OF RECORD.
  - PROVIDE SMOKE DETECTOR SENSITIVITY TEST METHOD PER CFC 907.8.3 & 907.8.4
  - A MINIMUM OF 48 HOURS NOTICE SHALL BE REQUIRED FOR ANY INSPECTION AND/OR TESTING.
  - ALL DEVICES OF THE FIRE ALARM SYSTEM SHALL BE APPROVED AND LISTED BY THE CALIFORNIA STATE FIRE MARSHAL.
  - A STAMPED SET OF APPROVED FIRE ALARM PLANS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. ANY DEVIATION FROM APPROVED PLANS, INCLUDING THE SUBSTITUTION OF DEVICES SHALL BE APPROVED BY THE FIRE MARSHAL.
  - ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE, OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE INSPECTOR OF RECORD.
  - A CERTIFICATE OF COMPLIANCE SHALL BE PREPARED BY THE INSTALLER AND GIVEN TO THE FIRE MARSHAL UPON COMPLETION OF THE INSTALLATION.
  - COMPLETE THE NFPA 72 RECORD OF COMPLETION, TESTING ALL DEVICES AND APPLIANCES. PROVIDE A COPY OF THE COMPLETED RECORD OF COMPLETION TO THE OWNER (SCHOOL DISTRICT), ARCHITECT, LOCAL FIRE AUTHORITY AND DSA VIA THE PROJECT INSPECTOR.



7075 CAMPUS RD  
MOORPARK, CA 93021  
TEL: (805) 378 - 1400

PROJECT TITLE AND SCHOOL LOCATION  
**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

7075 CAMPUS RD.  
MOORPARK, CA 93021



28328 AGOURA RD, 203 | AGOURA HILLS CA, 91011 | 905-558-4334

amador white architects, inc.

CONSULTANT  
**LUCCI & ASSOCIATES INC.**  
CONSULTING ELECTRICAL ENGINEERS  
3521 COSTE MALPASO, #611  
CAMARILLO, CA 93012-8094  
(805) 389-6620 FAX (805) 389-6619

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CONSTRUCTION DRAWINGS 31 JULY 2024

SHEET TITLE  
**EXISTING FIRE ALARM GENERAL NOTES AND DEVICE LEGEND M1 (M3 IS NOT REVISED)**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker

**E500**

DATE: 7/31/24 SHEET: OF

DATE: 8 October 2024 TIME: 12:26 pm  
PATHNAME: G:\24\1819\EL\Sheets\02-MODULAR BUILDINGS  
DRAWING FILENAME: 24-819E500  
DRAFTER: CM02

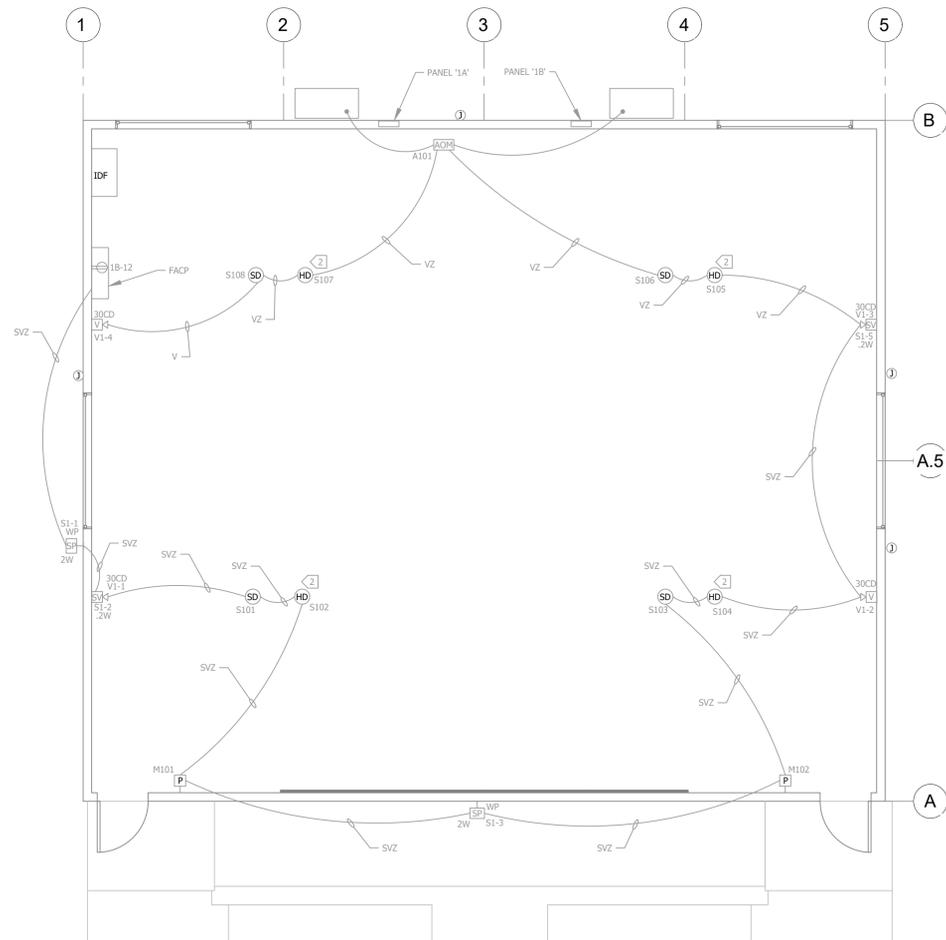
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DATE: 8 October 2024

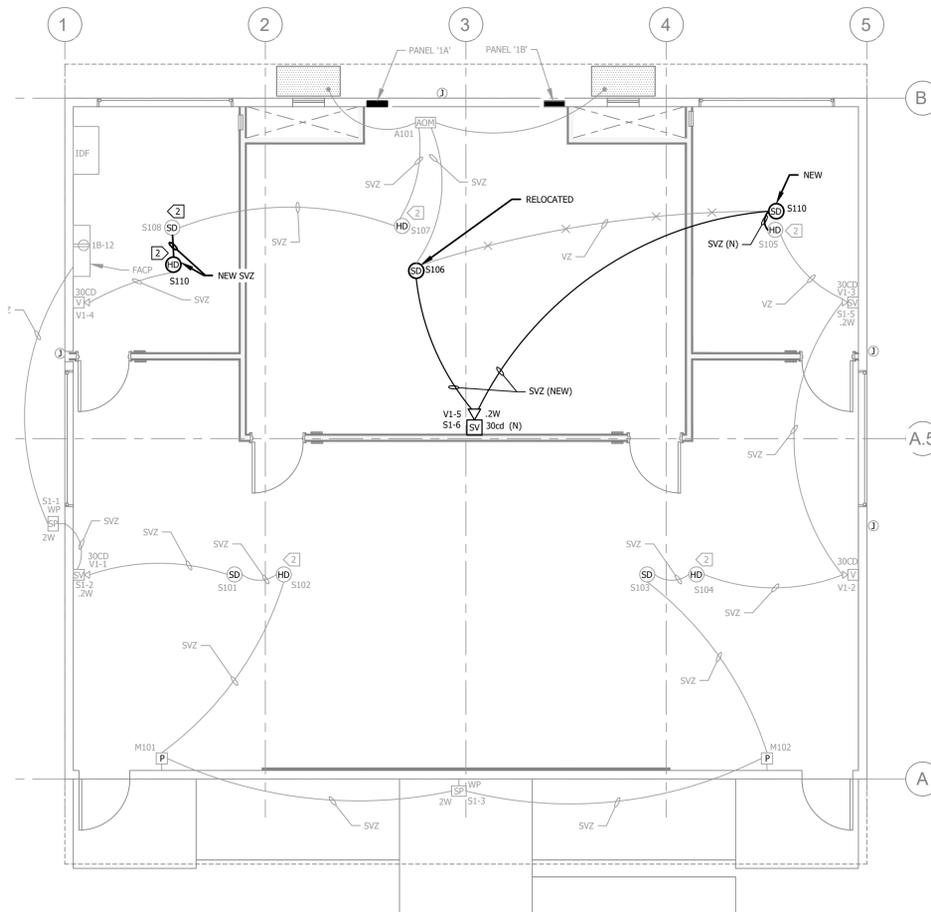
PATHNAME: G:\24\819\EL\Sheets\02-MODULAR BUILDINGS

DRAWING FILENAME: 24-819E501

DRAFTER: CH02



EXISTING FIRE ALARM PLAN - MODULAR 1 (M1) 2  
 SCALE: 1/4"=1'-0" E501



NEW FIRE ALARM PLAN - MODULAR 1 (M1) 1  
 SCALE: 1/4"=1'-0" E501

INSTALL NEW FA DEVICES PER FA CODE & REPROGRAM AS REQUIRED, EXTEND CONDUIT, CABLE & ADD BOXES AS REQUIRED FOR PROPER OPERATION

**SHEET NOTES:**

1. VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
2. 3/4" RED CONDUIT MINIMUM UNLESS OTHERWISE NOTED, 1" UNDER GROUND.
3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL COMMUNICATION CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.
4. MAXIMUM 180 DEGREE OF BEND BETWEEN PULL POINTS.
5. RUN COMMUNICATION CABLING IN CABLE TRAY TO MAXIMUM EXTENT POSSIBLE. WHERE CABLING IS NOT IN CABLE TRAY, CABLE SHALL BE IN CONDUIT.
6. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.

**KEY NOTES:**

- 1 PROVIDE ACCESS PANEL AS REQUIRED.
- 2 HEAT DETECTOR IN ATTIC UPPER STRUCTURE.

DO NOT INSTALL SMOKE OR HEAT DETECTORS WITHIN 36" OF SUPPLY OR RETURN AIR REGISTERS



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 MOORPARK, CA 93021  
 TEL: (805) 378-1400

PROJECT TITLE AND SCHOOL LOCATION  
**ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3**

7075 CAMPUS RD.  
 MOORPARK, CA 93021

COMMISSIONED ARCHITECT

**AMADOR**

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CONSTRUCTION DRAWINGS 31 JULY 2024

SHEET TITLE  
**FIRE ALARM PLAN M1**

PROJECT NO: 22-MPC-042	PROJECT ARCH: Designer
DRAWN: Author	CHECKED: Checker
SHEET NUMBER	

E501

DATE: 7/31/24	SHEET: OF
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ALTERATION OF TWO PORTABLE CLASSROOMS - M1 & M3

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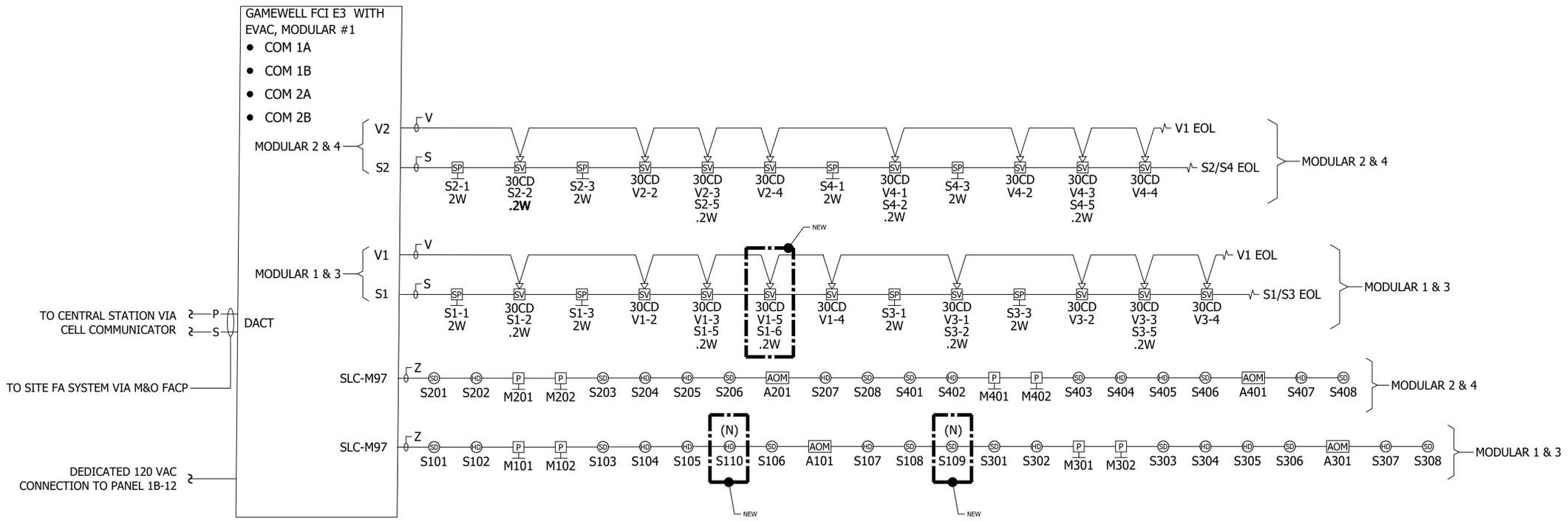
CONSTRUCTION DRAWINGS 31 JULY 2024

FIRE ALARM RISER DIAGRAM

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker

E503

DATE: 7/31/24 SHEET: OF

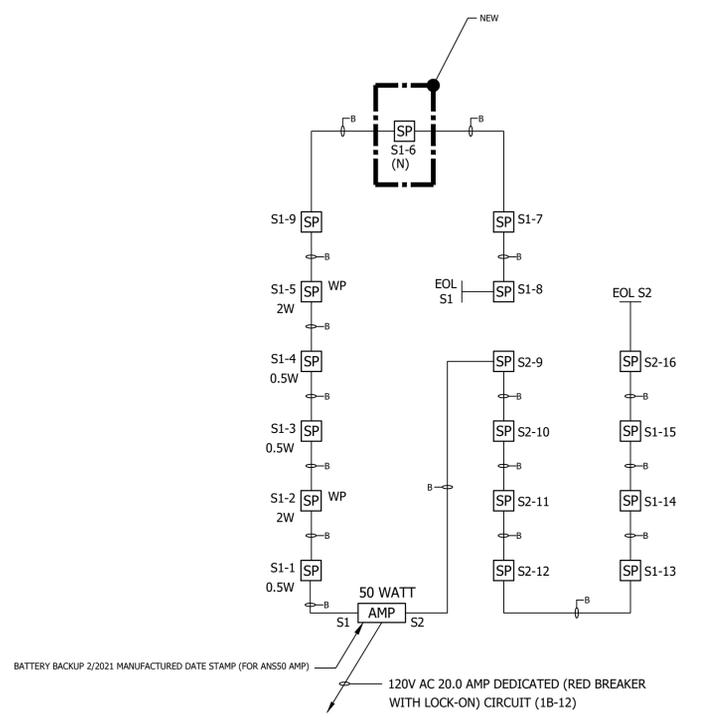


REPROGRAM SYSTEM FOR NEW DEVICES

ANS Audio Panel Battery Calculations

Item	Qty	Standby Current (Amps)	Total Standby	Alarm Current (Amps)	Total Alarm
ANS50 - 50W Amp	1 x	0.13	0.13	1.0	1.0
ANSREMSUP - Remote Mic Sup Module	1 x	0.03	0.03	0.05	0.05
ANSREM - Remote Mic	1 x	0.02	0.02	0.04	0.04
ANSZSC4A - Class A Converter	1 x	0.038	0.038	0.048	0.048
ANSRS18 - Remote Serial Interface	1 x	0.01	0.01	0.01	0.01
ANSAX - Audio Matching I/O	1 x	0.015	0.015	0.035	0.035
ANSBKUP - Backup Amp Module	1 x	0.04	0.04	0.01	0.01

Totals = 0.283 Amps Standby, 1.193 Amps Alarm  
24 Stdbdy Hrs., 15 Alarm Mins., 0.250 Alarm Hrs.  
6.792 + 0.298 = 7.09 AH  
REQUIRED MINIMUM Battery Size = 8.508 Amp Hours



SPEAKER SYSTEM SCALE: NONE

VOLTAGE DROP CALCULATIONS - SPEAKER APPLIANCE CIRCUITS

PANEL ID	CKT #	1/4 WATT	1/2 WATT	1 WATT	2 WATT	...	(I) TOTAL CURRENT	LENGTH FT.	CIR MILS	VOLTS DROPPED	% VOLTAGE DROP
AMP V1	4	0.068	0.000	0.000	0.528	...	0.596	165	6530	0.325	1.4
AMP V2	4	0.068	0.000	0.000	0.528	...	0.596	255	6530	0.503	2.1

VOLTAGE DROP CALCULATIONS - VISUAL APPLIANCE CIRCUITS

PANEL ID	CKT #	15cd STROBE	30cd STROBE	75cd STROBE	110cd STROBE	15cd HORN-STROBE	30cd HORN-STROBE	75cd HORN-STROBE	110cd HORN-STROBE	(I) TOTAL CURRENT	LENGTH FT.	CIR MILS	VOLTS DROPPED	% VOLTAGE DROP
MODIA S1	9	0.000	0.567	0.000	0.000	0.000	0.000	0.000	0.000	0.567	160	4110	0.477	2.0
MODIA S2	8	0.000	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.504	190	4110	0.503	2.1





**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**



This listing is based upon technical data submitted by the applicant. OSFM Fire Engineering staff has reviewed the test results and/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not be used to verify correct operational requirements or installation criteria. Refer to listee's data sheet, installation instructions and/or other suitable information sources.

Date Issued: 05/03/2024

Listing Expires: 06/30/2025

Authorized By: David Castillo, Program Coordinator  
Fire Engineering & Investigations Division



**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**

<b>LISTING No.:</b>	7270-1657.0333
<b>CATEGORY:</b>	7270 - HEAT DETECTOR
<b>LISTEE:</b>	EDWARDS, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL, 34202 Contact: Conover, Jewell 941 739-4358 Email: rhonda.micochero@carrier.com
<b>DESIGN:</b>	Models SIGA-HFD, SIGA-HRD, SIGA-H2D, SIGI-HFD, SIGI-HRD, *SIGA-HFD-NL, *SIGA-HRD-NL, *SIGA-H2D-NL, KI-HFD, KI-HRD, KIR-HD, and KI-H2D Analog Addressable Heat Detectors. Model SIGA-HFD is a 135°F fixed temperature heat detector. Model SIGA-HRD is a combination 15°F rate of rise/135°F fixed temperature heat detector. Models SIGI-HFD and SIGI-HRD are similar to Models SIGA-HFD and SIGA-HRD except for isolation circuitry. Models KI-HFD and KI-HRD are identical to Models SIGA-HFD and SIGA-HRD except for trade name. Model KIR-HD is similar to Model SIGA-HFD except for control panel compatibility. Model SIGA-H2D is similar to Model SIGA-HFD except for a programmable threshold. Model KI-H2D is identical to model SIGA-H2D except for the trade name and installation sheet. *Models SIGA-HFD-NL, SIGA-HRD-NL, and SIGA-H2D-NL are identical to the Models SIGA-HFD, SIGA-HRD, and SIGA-H2D respectively, except to signify no logo on the nameplate label. Refer to listee's data sheet for detailed product description and operational considerations.
<b>RATING:</b>	15.2-19.95 Vdc
<b>INSTALLATION:</b>	In accordance with listee's printed installation instructions, NFPA 72 and applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

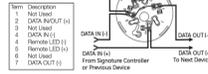
Page 1 of 3

**Typical Wiring**

The detector mounting bases accept #18 AWG (0.75mm<sup>2</sup>), #16 (1.0mm<sup>2</sup>), #14 AWG (2.0mm<sup>2</sup>), and #12 AWG (3.3mm<sup>2</sup>) wire sizes. Sizes #16 AWG (1.0mm<sup>2</sup>) and #18 AWG (0.75mm<sup>2</sup>) are preferred for ease of installation.

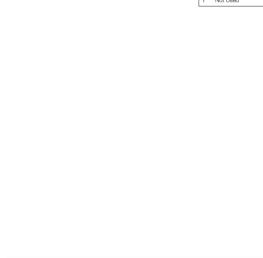
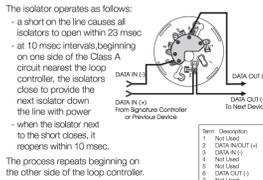
**Standard Detector Base, SIGA-SB, SIGA-SB4**

This is the basic mounting base for EDWARDS Signature Series detectors. The SIGA-LED Remote LED is supported by this base.



**Isolator Detector Base, SIGA-IB, SIGA-IB4**

This base includes a built-in line fault isolator for use on Class A circuits. A detector must be installed for it to operate. The isolator base does not support the SIGA-LED Remote LED.



DATA SHEET E85001-0647  
Not to be used for installation purposes. Issue 21



EDWARDS® Catalog ▶ Intelligent Initiating Devices

**Intelligent Heat Detectors  
SIGA-HRD, SIGA-HFD**



**Overview**

The Signature Series smoke detectors bring advanced sensing technology to a practical design that increases efficiency, saves installation time, cuts costs, and extends property protection capabilities. Continuous self-diagnostics ensure reliability over the long haul, while the latest thermostat technology makes these detectors ideal whenever dependable heat detection is required.

The SIGA-HRD is an intelligent fixed temperature/rate-of-rise fire detector. It monitors the temperature of the surrounding air and analyzes the data from the sensor to determine whether to initiate an alarm. The rate-of-rise heat function quickly detects a fast-flaming fire. The fixed-temperature heat function detects fire when the air temperature near the detector exceeds the alarm point.

DATA SHEET E85001-0647  
Not to be used for installation purposes. Issue 21



**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**

<b>MARKING:</b>	Listee's name, model number, electrical rating and UL label. Models SIGA-HFD, SIGA-HRD, SIGA-H2D, SIGI-HFD, SIGI-HRD, *SIGA-HFD-NL, *SIGA-HRD-NL, and *SIGA-H2D-NL are under the Edwards brand. Models KI-HFD, KI-HRD, KIR-HD, and KI-H2D are under the Kidde brand.
<b>APPROVAL:</b>	Listed as analog addressable heat detectors. Models KI-HFD and KI-HRD are for use with listee's Models VS1, VS2 and VS4 (CSFM No. 7165-1657.0244); VM-1 (CSFM No. 7165-1657.0309) fire alarm control units. Models SIGA-HFD, SIGA-HRD, SIGA-H2D, SIGI-HFD, SIGI-HRD, *SIGA-HFD-NL, *SIGA-HRD-NL, and *SIGA-H2D-NL are for use with listee's Models EST3 (CSFM No. 7165-1657.0186); iO64, iO500 and iO1000 (CSFM No. 7165-1657.0244); EST3X (CSFM No. 7165-1657.0306) fire alarm control units. Model KIR-HD is for use with listee's Models FX-64, FX-254 and FX-1000 (CSFM No. 7165-1657.0244) fire alarm control unit. Models SIGA-HFD, SIGA-HRD, SIGA-H2D, *SIGA-HFD-NL, *SIGA-HRD-NL, and *SIGA-H2D-NL are for use with listee's bases; Models SIGA-SB, *SB4, *RB, *RB4, *IB, *IB4 (CSFM No. 7300-1657.0120), SIGA-AB4G (CSFM No. 7300-1657.0222), SIGA-AB4GT (CSFM No. 7300-1657.0307) and SIGA-AB4G-LF (CSFM No. 7300-1657.0322). Models SIGI-HFD and SIGI-HRD are for use with listee's bases; Models SIGI-AB4G (CSFM No. 7300-1657.0222), SIGI-AB4GT (CSFM No. 7300-1657.0307) and SIGI-AB4G-LF (CSFM No. 7300-1657.0322). Models KI-HFD, KI-HRD and KIR-HD are for use with listee's bases; Models KI-ABST (CSFM No. 7300-1657.0222), KI-ABDT (CSFM No. 7300-1657.0307) and KI-ABLT (CSFM No. 7300-1657.0322). Model KI-H2D is for use with listee's base; Models KI-ABST (CSFM No. 7300-1657.0222). Authority having jurisdiction should be consulted prior to installation. Refer to listee's installation instruction manual for details. Models comply with the applicable requirements in UL 521, 7th Edition.
<b>NOTES:</b>	02-02-24 MH

Page 2 of 3



LIFE SAFETY & INCIDENT MANAGEMENT  
Contact Us:  
Email: edwards.fire@utc.com  
Web: edwards-fire.com  
1016 Corporate Park Drive  
Melville, NY 11762  
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**Dimensions**



**Specifications**

	SIGA-HRD	SIGA-HFD
Operating voltage	15.20 to 19.95 VDC	
Normal operating current	51 µA	
Alarm current	68 µA	
Vibration level	10 to 35 Hz, with an amplitude of 0.01 in.	
Rate-of-rise rating	15°F/min (8°C/min)	NA
Fixed temperature rating	135°F (57.2°C). Actual alarm point 129 to 141°F (53.9 to 60.6°C).	
Maximum spacing	50 ft. (15.2 m) centers	Special
Factory Mutual rating	Ultra-fast	Special
Compatible bases	See Ordering Information	See Ordering Information
Compatible detector testers	Testfire 1000, Testfire 2000	Testfire 2000
Operating environment	32 to 100°F (0 to 38°C), 0 to 95% RH, noncondensing	
Construction	High Impact Engineering Polymer, White	
Storage temperature	-4 to 140°F (-20 to 60°C)	
Agency Listings	UL21, CANUL, S530, CSFM, FM approved	

**Ordering Information**

Catalog Number	Description	Ship Wt. (lb./kg)
SIGA-HRD	Intelligent fixed temperature/rate-of-rise heat detector	0.4 (0.18)
SIGA-HFD	Intelligent fixed temperature heat detector	0.4 (0.18)

**Compatible Bases**

Model	Description	Ship Wt. (lb./kg)
SIGA-SB	Detector Mounting Base - Standard	
SIGA-SB4	4-inch Detector Mounting Base c/w Trim Skirt	
SIGA-RB	Detector Mounting Base w/Relay	0.2 (0.09)
SIGA-RB4	4-inch Detector Mounting Base w/Relay, c/w Trim Skirt	
SIGA-IB	Detector Mounting Base w/Fault Isolator	
SIGA-IB4	4-inch Detector Mounting Base w/Fault Isolator, c/w Trim Skirt	
SIGA-AB4G	Audible (Sounder) Base for Fire Detectors	0.3 (0.15)
SIGA-AB4G-LF	Low Frequency Audible (Sounder) Base for CO and Fire Detectors	0.3 (0.15)
SIGA-AB4GT	Audible (Sounder) Base for CO and Fire Detectors	
SIGA-LED	Remote Alarm LED (not for EN54 applications)	
SIGA-TS4	Trim Skirt (supplied with 4-inch bases)	0.1 (0.04)
SIGA-TS	Trim Skirt (optional for non-4-inch bases)	
SIGA-RTA	Detector Removal Tool	

DATA SHEET E85001-0647  
Not to be used for installation purposes. Issue 21

**Application**

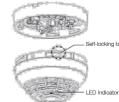
The SIGA-HRD combination fixed temperature/rate-of-rise heat detector provides a 15°F (8°C) per minute rate-of-rise heat sensor for the detection of fast-developing fires, as well as a 135°F (57°C) fixed temperature sensor for slow building fires. The SIGA-HFD fixed temperature detector provides a 135°F (57°C) fixed temperature sensor for slow building fires.

**Compatibility**

Signature Series heat detectors are compatible only with the Signature Loop Controller.

**Installation**

Signature Series detectors mount to North American 1-gang boxes, 3-1/2 inch or 4 inch octagon boxes, and to 4 inch square electrical boxes 1-1/2 inches (38 mm) deep. They mount to European BESA and 1-gang boxes with 60.3 mm fixing centers. See mounting base installation and wiring for more information.



**Sensing and reporting technology**

The microprocessor in each detector provides additional benefits - Self-diagnostics and History Log, Automatic Device Mapping, and Fast, Stable Communication.

**Self-diagnostics and History Log** - Each Signature Series detector constantly runs self-checks to provide important maintenance information. The results of the self-check are automatically updated and permanently stored in the detector's non-volatile memory.

**Automatic Device Mapping** - The loop controller learns where each device's serial number address is installed relative to other devices on the circuit. This mapping feature provides supervision of each device's installed location to prevent a detector from being reinstalled (after cleaning etc.) in a different location from where it was originally.

**Fast Stable Communication** - On-board intelligence means less information needs to be sent between the detector and the loop controller. Other than regular supervisory polling response, the detector only needs to communicate with the loop controller when it has something new to report.

DATA SHEET E85001-0647  
Not to be used for installation purposes. Issue 21

TIME: 12:25 PM

DATE: 8 October 2024

PATHNAME: G:\24\19\EL\Sheets\02-MODULAR BUILDINGS

DRAWING FILENAME: 24-819E505

DRAFTER: CH02

DIVISION OF THE STATE ARCHITECT



7075 CAMPUS RD  
MOORPARK, CA 93021  
TEL: (805) 378-1400

**ALTERNATION OF TWO  
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CLASSROOMS - M1 & M3**

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2832R AGOURA RD, 203 | AGOURA HILLS CA, 91301 | 905-508-4334  
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STAMPS/SEALS



CONSTRUCTION DRAWINGS 31 JULY 2024

**MANUFACTURER DATA  
SHEETS FOR  
INTELLIGENT HEAT  
DETECTOR**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker

**E505**

DATE: 7/31/24 SHEET: OF



**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**

**NOTES:**  
The photoelectric type detectors are generally more effective at detecting slow, smoldering fires, which smolder for hours before bursting into flames. Sources of these fires may include cigarettes burning in couches or bedding. The ionization type detectors are generally more effective at detecting fast, flaming fires, which consume combustible materials rapidly and spread quickly. Sources of these fires may include paper burning in a waste container or a grease fire in the kitchen.

\*Rev 02-15-18 gt



This listing is based upon technical data submitted by the applicant. CSFM Fire Engineering staff has reviewed the test results and/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not be used to verify correct operational requirements or installation criteria. Refer to listee's data sheet, installation instructions and/or other suitable information sources.

Date Issued: 05/03/2024

Listing Expires: 06/30/2025

Authorized By: David Castillo, Program Coordinator  
Fire Engineering & Investigations Division

Page 3 of 3



**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**

<b>LISTING No.:</b>	7272-1657-0331
<b>CATEGORY:</b>	7272 - SMOKE DETECTOR-SYSTEM TYPE-PHOTOELECTRIC
<b>LISTEE:</b>	EDWARDS, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL, 34202 Contact: Conover, Jewell 941 739-4358 Email: rmonda.micochero@carrier.com
<b>DESIGN:</b>	Models SIGA-PD, *SIGI-PD, *KI-PD and *KIR-PD Analog addressable photoelectric smoke detectors. *Model SIGI-PD is similar to Model SIGA-PD except for isolation circuitry. *Model KI-PD is identical to Model SIGA-PD except for trade name. *Model KIR-PD is similar to Model SIGA-PD except for control panel compatibility. Refer to listee's data sheet for detailed product description and operational considerations.
<b>RATING:</b>	15.2-19.95 Vdc
<b>INSTALLATION:</b>	In accordance with listee's printed installation instructions, NFPA 72 and applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.
<b>MARKING:</b>	Listee's name, model number, electrical rating and UL label. *Models SIGA-PD and SIGI-PD are under the Edwards brand. *Models KI-PD and KIR-PD are under the Kidde brand.
<b>APPROVAL:</b>	Listed as analog addressable photoelectric smoke detectors.  *Model KI-PD is for use with listee's Models VS1, VS2 and VS4 (CSFM No. 7165-1657-0244); VM-1 (CSFM No. 7165-1657-0309) fire alarm control units.

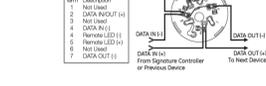
Page 1 of 3

**Typical Wiring**

The detector mounting bases accept #18 AWG (0.75mm<sup>2</sup>), #16 (1.0mm<sup>2</sup>), #14 AWG (1.5mm<sup>2</sup>), and #12 AWG (2.5mm<sup>2</sup>) wire sizes. Sizes #16 AWG (1.0mm<sup>2</sup>) and #18 AWG (0.75mm<sup>2</sup>) are preferred for ease of installation.

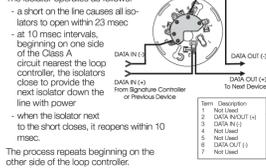
**Standard Detector Base, SIGA-SB, SIGA-SB4**

This is the basic mounting base for EDWARDS Signature Series detectors. The SIGA-LED Remote LED is supported by this Base.



**Isolator Detector Base, SIGA-IB, SIGA-IB4**

This base includes a built-in line fault isolator for use on Class A circuits. A detector must be installed for it to operate. The isolator base does not support the SIGA-LED Remote LED.



**Relay Detector Base, SIGA-RB, SIGA-RB4**

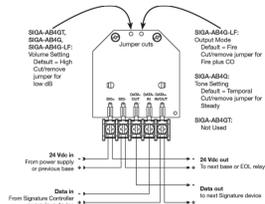
This base includes a relay. Normally Open or Normally Closed operation is selected during installation. The dry contact is rated for 1 amp (picot duty) @ 30 Vdc. The relay's position is supervised to avoid accidentally jamming it out of position. The SIGA-RB can be operated as a control relay if programmed to do so at the control panel. The relay base does not support the SIGA-LED Remote LED.



Page 3 of 4

**Audible Sounder Bases, Fire Mode**

AB4GT, AB4G, AB4G-LF sounder bases



**Warnings & Cautions**

- This detector does not operate without electrical power. As fires frequently cause power interruption, discuss further safeguards with the local fire protection specialist.
- This detector does not sense fires in areas where smoke cannot reach the detector. Smoke from fires in walls, roofs, or on the opposite side of closed doors may not reach the detector.
- Photoelectric detectors have a wide range of fire-sensing capabilities and are best suited for detecting slow, smoldering fires.
- In Canada, install according to CAN/ULC-S524 Standard for the Installation of Fire Alarm Systems, CSA C22.1 Canadian Electrical Code, and the local authority having jurisdiction.

Page 1 of 4 DATA SHEET E85001-0646 Not to be used for installation purposes. Issue 1



EDWARDS Catalog ▶ Intelligent Initiating Devices

**Intelligent Smoke Detector  
SIGA-PD**



**Overview**

The Signature Series SIGA-PD optical smoke detector brings advanced sensing technology to a practical design that increases efficiency, saves installation time, cuts costs, and extends life safety and property protection capabilities. Continuous self-diagnostics ensure reliability over the long-haul, while environmental compensation helps reduce maintenance costs.

Like all Signature Series detectors, the SIGA-PD is an intelligent device that gathers analog information from its optical sensor, converting this data into digital signals. To make an alarm decision, the detector's on-board microprocessor measures and analyzes sensor readings and compares this information to historical data. Digital filters remove signal patterns that are not typical of fires, thus virtually eliminating unwanted alarms.

**Standard Features**

- Next Generation Optical Smoke Sensing Technology
- Wide 0.53 to 3.94 %ft. (1.7 to 12.35 %ft) smoke obscuration
- Uses Existing Wiring
- Automatic Device Mapping
- Up To 250 Total Signature Addresses Per Loop
- Two Levels of Environmental Compensation
- Two Levels of Dirty Detector Warning
- Twenty Pre-Alarm Settings
- Five Sensitivity Settings
- Non-Volatile Memory
- Electronic Addressing
- Identification of Dirty or Defective Detectors
- Automatic Day/Night Sensitivity Adjustment
- Bicolor (Green/Red) Status Led
- Standard, Relay, Fault Isolator, and Audible Mounting Bases
- Sensor Markings Provide Easy Testing Identification

Page 1 of 4

Page 1 of 4 DATA SHEET E85001-0646 Not to be used for installation purposes. Issue 1

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STAMP/SEALS



CONSTRUCTION DRAWINGS 31 JULY 2024

**MANUFACTURER DATA  
SHEETS FOR  
INTELLIGENT SMOKE  
DETECTOR**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker  
SHEET NUMBER:

**E506**

DATE: 7/31/24 SHEET: OF



**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**

*Models SIGA-PD and SIGI-PD are for use with listee's Models EST3 (CSFM No. 7165-1657-0186), i04, i0500 and i01000 (CSFM No. 7165-1657-0244); EST3X (CSFM No. 7165-1657-0306) fire alarm control units.
*Model KIR-PD is for use with listee's Models FX-64, FX-254 and FX-1000 (CSFM No. 7165-1657-0244) fire alarm control units.
*Model SIGA-PD is for use with listee's bases: Models SIGA-SB, -SB4, -RB, -RB4, -IB, -IB4 (CSFM No. 7300-1657-0120); SIGA-AB4G (CSFM No. 7300-1657-0222); SIGA-AB4GT (CSFM No. 7300-1657-0307) and SIGA-AB4G-LF (CSFM No. 7300-1657-0322).
*Model SIGI-PD is for use with listee's bases: Models SIGI-AB4G (CSFM No. 7300-1657-0222); SIGI-AB4GT (CSFM No. 7300-1657-0307) and SIGI-AB4G-LF (CSFM No. 7300-1657-0322).
*Models KI-PD and KIR-PD are for use with listee's bases: Models KI-ABST (CSFM No. 7300-1657-0222); KI-ABOT (CSFM No. 7300-1657-0307) and KI-ABL1 (CSFM No. 7300-1657-0322).
Authority having jurisdiction should be consulted prior to installation. Refer to listee's installation instruction manual for details.

Page 2 of 3



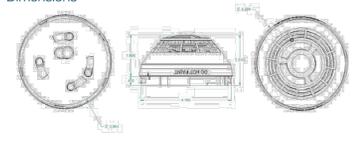
LIFE SAFETY & INCIDENT MANAGEMENT

Contact us:  
Email: edwards.fire@uts.com  
Web: Edwards-fire.com

EDWARDS is a UTC brand.  
1016 Corporate Park Drive  
Mebane, NC 27056

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**Dimensions**



**Specifications**

Operating voltage	15.20 to 19.95 VDC
Normal operating current	32 µA
Alarm current	32 µA
Smoke Sensitivity Range	UL/ULC: 0.53 to 3.94 %ft. (1.7 to 12.35 %ft) obscuration
Vibration level	10 to 35 Hz, with an amplitude of 0.01 in.
Air velocity	0 to 4,000 ft./min (0 to 20 m/s)
Wall mounting	12 in. (305 mm) max. from ceiling
Compatible bases	See Ordering Information
Compatible detector testers	testfire 1000, testfire 2000
Operating environment	32 to 122°F (0 to 49°C), 0 to 95% RH, noncondensing
Construction	High Impact Engineering Polymer, White
Storage temperature	-4 to 140°F (-20 to 60°C)
Environmental compensation	Automatic
Agency Listings	CAN/ULC-S526, UL 268, UL 268A

**Ordering Information**

Catalog Number	Description	Ship Wt. (lbs/kg)
SIGA-PD	Intelligent Optical Smoke Detector	0.4 (0.18)

**Accessories**

SIGA-SB	Detector Mounting Base - Standard	
SIGA-SB4	4-inch Detector Mounting Base c/w Trim Skirt	
SIGA-RB	Detector Mounting Base w/Relay	
SIGA-RB4	4-inch Detector Mounting Base w/Relay, c/w Trim Skirt	0.2 (0.09)
SIGA-IB	Detector Mounting Base w/Fault Isolator	
SIGA-IB4	4-inch Detector Mounting Base w/ Fault Isolator, c/w Trim Skirt	
SIGA-LED	Remote Alarm LED (not for EN54 applications)	
SIGA-AB4G	Audible (Sounder) Base for Fire Detectors	0.3 (0.15)
SIGA-AB4G-LF	Low Frequency Audible (Sounder) Base for CO and Fire Detectors	0.3 (0.15)
SIGA-AB4GT	Audible (Sounder) Base for CO and Fire Detectors	0.3 (0.15)
SIGA-TS4	Trim Skirt (supplied with 4-inch bases)	0.1 (0.04)
SIGA-TS	Trim Skirt - (optional for non 4-inch bases)	0.1 (0.04)
SIGA-DMP	Detector Mounting Plate	3.0 (1.3)
SIGA-RFA	Detector Removal Tool	
SIGA-VA	Detector Cleaning Tool	

Page 4 of 4

Page 4 of 4 DATA SHEET E85001-0646 Not to be used for installation purposes. Issue 1

**Application**

The SIGA-PD detects extremely small particles of combustion and triggers an alarm at the first sign of smoke. Thanks to its high-performance forward-scattering reflective response technology, the photoelectric smoke sensor responds quickly and reliably to a wide range of fire types, especially slow burning fires fueled by combustibles typically found in modern multi-use buildings.

**Compatibility**

The SIGA-PD detector is compatible only with the Signature Loop Controller.

**Installation**

Signature Series detectors mount to North American 1-gang boxes, 3-1/2 inch or 4 inch octagon boxes, and to 4 inch square electrical boxes 1-1/2 inches (38 mm) deep. They mount to European BESA and 1-gang boxes with 60.3 mm fixing centers. See mounting base installation and wiring for more information.

**Sensing and reporting technology**

The microprocessor in each detector provides additional benefits - Self-Diagnostics and History Log, Automatic Device Mapping, and Fast, Stable Communication.

**Self-Diagnostics and History Log** - Each Signature Series detector constantly runs self-checks to provide important maintenance information. The results of the self-check are automatically updated and permanently stored in the detector's non-volatile memory.

**Automatic Device Mapping** - The loop controller learns where each device's serial number address is installed relative to other devices on the circuit. The mapping feature provides supervision of each device's installed location to prevent a detector from being reinstalled (after cleaning etc.) in a different location from where it was originally.

**Fast Stable Communication** - On-board intelligence means less information needs to be sent between the detector and the loop controller. Other than regular supervisory polling responses, the detector only needs to communicate with the loop controller when it has something new to report.

Page 2 of 4

Page 2 of 4 DATA SHEET E85001-0646 Not to be used for installation purposes. Issue 1

TIME: 12:25 pm

DATE: 8 October 2024

PATHNAME: G:\24\819\VEL\Sheets\02-MODULAR BUILDINGS

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DRAFTER: CH02

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Drawing Scale: 1:1  
Drawing Author: CH02  
Drawing Date: 10/08/2024 10:58:43 AM



**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

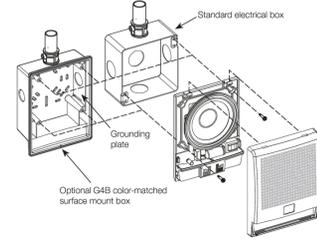
**LISTING SERVICE**

<b>LISTING No.:</b>	7320-1657-0211
<b>CATEGORY:</b>	7320 - SPEAKERS
<b>LISTEE:</b>	EDWARDS, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL, 34202 Contact: Conover, Jewell 941 739-4358 Email: rhonda.micochero@carrier.com
<b>DESIGN:</b>	Models G4-S2, G4R-S2, G4-S7, G4R-S7, G4F-S7, G4R-S7, G4F-S2, G4R-S2, GC-S2, GCF-S2, GC-S7, GCF-S7, and *GCFR-S7 speakers.  Models G4-S2VM, G4R-S2VM, G4-S7VM, G4R-S7VM, G4F-S2VM, G4R-S2VM, G4F-S7VM, G4R-S7VM, GC-S2VM, GCF-S2VM, GC-S7VM, GCF-S7VM, GC-S2VMH, GCF-S2VMH, GC-S7VMH, GCF-S7VMH, *GCFR-S7VM, *G4F-S2V1575, *G4RF-S2V1575, *G4F-S7V1575, and *G4RF-S7V1575 speaker strobes.  Models G4B and G4RB speaker enclosure backbox. Refer to listee's data sheet for detailed product description and operational considerations.
<b>RATING:</b>	25 Vrms or 70 Vrms  ½ W, ½ W, 1 W, 2 W  G4 Candela: 15cd, 30cd, 75cd, 110cd.  GC Candela: 15cd, 30cd, 75cd, 95cd.  H Candela: 95cd, 115cd, 150cd, 177cd.  *G4F-S2V1575, *G4RF-S2V1575, *G4F-S7V1575, and *G4RF-S7V1575 15/75 cd
<b>INSTALLATION:</b>	In accordance with listee's printed installation instructions, applicable codes and ordinances, and in a manner acceptable to the authority having jurisdiction.
<b>MARKING:</b>	Listee's name, model number, electrical/candela rating, and UL label.

Page 1 of 2

**Installation and Mounting**

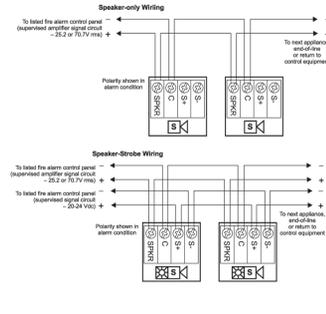
All models are intended for indoor wall mounted applications only. Speakers and speaker-strobes are flush mounted to a North American 4" square electrical box, 2 1/4" (64 mm) deep or a European 100 mm square box. Signals may be surface mounted to a Genesis surface-mount box (see ordering information for details).  
  
Two tabs at the top of the signal unlock the cover to facilitate mounting. The shallow depth of Genesis devices leaves room behind the signal for extra wiring. Once installed with the cover in place, no mounting screws are visible.



EDWARDS recommends that these speaker-strobes always be installed in accordance with the latest recognized edition of national and local codes. Refer to installation sheet for mounting height information.

**Wiring**

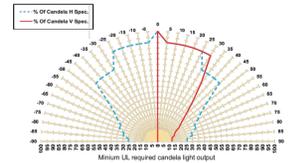
Field wiring is connected to Genesis signals with terminals that accommodate #18 to #12 AWG (0.75 mm<sup>2</sup> to 2.5 mm<sup>2</sup>) wiring.



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**Light output**

Per cent of UL rating versus angle



**UL name plate maximum operating current (RMS-mA)**

Cd rating	"15" or "D"	"30" or "C"	"75" or "B"	"110" or "A"
16 Vdc	95	130	230	294
16 Vrms	120	169	329	375

**Typical current, milliamps - average (RMS)**

Cd rating	"15" or "D"	"30" or "C"	"75" or "B"	"110" or "A"
20 Vdc	65 (78)	93 (101)	182 (188)	238 (245)
24 Vdc	55 (63)	78 (86)	153 (159)	193 (203)
31 Vdc	45 (53)	63 (69)	120 (124)	151 (157)
20 Vrms	56 (106)	79 (147)	147 (284)	197 (342)
24 Vrms	50 (95)	66 (130)	121 (225)	155 (283)
27 Vrms	44 (84)	60 (115)	107 (200)	137 (251)

Light output switch settings for UL 1971 listed models are selectable by numeric candela value. Light output for Mass Notification (ECSS/MNS) appliances is selectable by A, B, C, or D designations.

Color	Switch Position A	Switch Position B	Switch Position C	Switch Position D
Clear	110 cd	75 cd	30 cd	15 cd
Amber	95 cd	65 cd	26 cd	13 cd

**Sound level output**

**G4HF High Frequency Models, dBA at 3.05 m (10 ft)**

Voltage	Setting (nominal)	Wattage (actual)	UL 1480		ULCS-S41		Anechoic (nominal)
			Rating	ULCS-S41 Rating	Rating	Rating	
25 VRMS	1/4 W	0.25 W	80.9	81.5	81	81	
	1/2 W	0.50 W	84.1	84.3	84	84	
	1 W	1.00 W	86.6	87.2	87	87	
	2 W	2.00 W	89.7	90.1	90	90	
70 VRMS	1/4 W	0.25 W	81.8	81.9	81	81	
	1/2 W	0.50 W	84.6	84.9	84	84	
	1 W	1.00 W	87.3	88.2	87	87	
	2 W	2.00 W	90.5	90.9	90	90	

UL 1480: Sound level output at 10 ft (3.05 m) measured in a reverberant room using 400 to 4,000 Hz band limited pink noise. ULCS-S41: Sound level output at 10 ft (3.05 m) measured in anechoic chamber using 0 to 4,000 Hz band limited pink noise.

**G4 Standard Frequency Models**

Speaker Wattage Tap	Sound Output Level	UL 1480: Sound level output at 10 ft (3.05 m) measured in a reverberant room using 400 to 4,000 Hz band limited pink noise.
1/4 Watt	80 dBA	
1/2 Watt	83 dBA	
1 Watt	86 dBA	4,000 Hz band limited pink noise.
2 Watt	89 dBA	

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**Wall Speakers, Speaker-Strobes**  
Genesis G4 Series



**Overview**

The Genesis line of life safety and emergency communications speakers and speaker-strobes combine high performance output with a low profile design to deliver a life safety audio solution that's as versatile as it is effective. Protruding no more than one inch from the wall, these appliances blend inconspicuously with any decor.

Optional amber lens tints, ALERT or FIRE markings, and red or white housing colors ensure there is a device for every application, including mass notification and emergency communications.

Speakers feature selectable wattage taps, while speaker-strobes allow for both wattage and light output levels to be configured in the field. Both settings remain clearly visible — even after final installation, which allows devices to be easily fine-tuned to achieve maximum benefit in exchange for the lowest possible system overhead.

High fidelity models meet the NFPA 520 Hz requirements for newly constructed commercial sleeping areas. They also produce crisp, clear voice audio output that is highly intelligible over large areas.

All Genesis speakers include a DC blocking capacitor to allow electrical supervision of the audio distribution circuit. Models for 25 Vrms and 70 Vrms audio circuits are available. With their sleek back construction, these speakers are extra durable and provide outstanding audibility.

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EST Catalog ▶ Speakers, Telephones

**Standard Features**

- High Fidelity 520 Hz speaker models available**  
Low frequency output meets NFPA standards for newly constructed commercial sleeping areas; increases sound fidelity and audio intelligibility.
- Unique low-profile design**  
– The most compact UL/ULC listed speaker-strobe available  
– Ultra-slim, protrudes a mere one inch from the wall  
– Attractive appearance, no visible mounting screws
- Field configurable – no need to remove the device**  
– ¼, ½, 1, or 2 watt operation and selectable candela output with convenient switches that remain visible even after the unit is installed
- Mass Notification models available with amber lenses**
- Unparalleled performance**  
– loud 90 dBA output ensures clear, crisp audio  
– Exclusive FullLight strobe technology produces even light distribution  
– Precision timing electronics meet tough synchronizing standards for strobes when used with compatible modules  
– Optional field-configurable temporal strobe output  
– 25 Vrms and 70 Vrms models available, all supplied with a DC blocking capacitor for audio circuit supervision
- Easy to install**  
– Fits all standard 4-inch square electrical boxes with plenty of room behind the signal for extra wire – no extension ring or trim plate needed  
– #18 - #12 AWG terminals – ideal for long runs or using existing wiring

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**CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING & INVESTIGATIONS DIVISION  
BUILDING MATERIALS LISTING PROGRAM**

**LISTING SERVICE**

<b>APPROVAL:</b>	Listed as speakers and speaker/strobes for use with separately listed compatible fire alarm control unit. Speakers with a strobe are suitable for the hearing impaired. For indoor use only. Models G4-S2VM, G4R-S2VM, G4-S7VM, G4R-S7VM, G4F-S2VM, G4R-S2VM, G4F-S7VM, G4R-S7VM, GC-S2VM, GCF-S2VM, GC-S7VM and GCF-S7VM are intended to be used with models G1M-RM (CSFM Listing No. 7320-1657:201), and SIGA-CC1S and SIGA-MCC1S (CSFM Listing No. 7300-1657:121) sync modules.  If the distinctive three-pulse Temporal Pattern Fire Alarm Evacuation signal (for total evacuation) in accordance with NFPA 72, 2002 Edition is required, the appliance must be used with a fire alarm control unit that can generate the temporal pattern signal. Refer to listee's Installation Instruction Manual for details.
<b>NOTES:</b>	Formerly 7320-1591:211 and 7320-1388:243

7-29-10 ma

This listing is based upon technical data submitted by the applicant. OSFM Fire Engineering staff has reviewed the test results and/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not be used to verify correct operational requirements or installation criteria. Refer to listee's data sheet, installation instructions and/or other suitable information sources.

**Date Issued: 05/03/2024** **Listing Expires: 06/30/2025**

Authorized By: **David Castillo**, Program Coordinator  
Fire Engineering & Investigations Division

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**Specifications**

**Genesis Speakers and Speaker-Strobes**

<b>Housing</b>	Red or white textured UV stabilized, color impregnated engineered plastic.
<b>Dimensions</b>	Height: 6.5" (165 mm). Width: 5" (127 mm). Depth to wall: 1" (25 mm).
<b>Mounting</b>	Flush: North-American 4" square box, 2 1/8" (64 mm) deep. Surface: model G4B (white) or G4RB (red) surface mount box.
<b>Wire Connections</b>	Screw terminals: separate polarized inputs for speaker and strobe, #18 to #12 AWG (0.75 mm <sup>2</sup> to 2.5 mm <sup>2</sup> ) wire size
<b>Operating environment</b>	32-120° F (0-49° C) ambient temperature; 0-93% relative humidity.
<b>Agency listings and approvals, G4 Models</b>	Meets ULCS-S41, year 2004 UL requirements for standards UL1638 and UL1971. Complies with UL1480 Fifth Edition. UL/ULC File Number: S2813. FM, MEA, CSFM approved. CSFM File Number: 7320-1657-0211/0285. Speaker-strobes comply with ADA Code of Federal Regulation Chapter 28 Part 36 Final Rule.
<b>Agency listings and approvals, Low Frequency G4HF Models</b>	UL 484 Listed for low frequency signaling applications. Meets ULCS-S41, year 2004 UL requirements for standards UL1638 and UL1971. Complies with UL1480 Fifth Edition. FM, MEA, CSFM pending. Speaker-strobes comply with ADA Code of Federal Regulation Chapter 28 Part 36 Final Rule.

**Speakers**

<b>Input/Operating Volts</b>	25 VRMS or 70 VRMS. See ordering information.
<b>Speaker Cone</b>	Speaker frequency response: 400 to 4,000 Hz. Optimized for voice intelligibility, 4-inch (102mm) mylar cone, sealed back construction.

**Strobes**

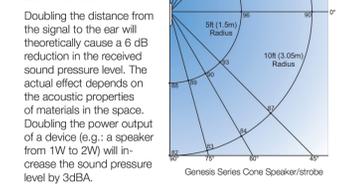
<b>Clear Strobe Output Rating</b>	UL 1971, ULCS S26: selectable 15 cd, 30 cd, 75 cd, or 110 cd output UL 1971: 15 cd (fixed 15/75 cd models) UL 1638, ULCS S26: 75 cd (fixed 15/75 cd models)
<b>Amber Strobe Output Rating</b>	UL 1638: 13 (D), 26 (C), 65 (B), 95 (A)
<b>Strobe Operating Voltage</b>	16 - 33 Vdc Regulated, 16-33 V Full wave rectified (UL Voltage Designations "Regulated 24" and "24 fwr")
<b>Strobe Flash Rate</b>	One flash per second.
<b>Strobe Flash Synchronization</b>	All strobes: one flash per second (fps) within 200 milliseconds over 30 minutes on common circuit. All strobes: Synchronization source required to comply with UL 1971 synchronization standard. Temporal setting (private mode only): synchronized to temporal output on the same circuit.
<b>Synchronization Sources</b>	SIGA-CC1S, SIGA-MCC1S, SIGA-CC2A, SIGA-MCC2A, G1M-RM BPS6A, BPS10A, AP66A, APS10A, IO Series, Fireshed Plus 3, 5 and 10 zone.
<b>Strobe Lens Material</b>	Polycarbonate

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**Speaker Application**

The suggested sound pressure level for each signaling zone used with alert or alarm signals is a minimum of 15 dB above the average ambient sound level or 5 dB above the maximum sound level having a duration of at least 60 seconds, whichever is greater. This is measured 5 feet (1.5 m) above the floor.



Doubling the distance from the signal to the ear will theoretically cause a 6 dB reduction in the received sound pressure level. The actual effect depends on the acoustic properties of the space. Doubling the power output of a device (e.g.: a speaker from 1W to 2W) will increase the sound pressure level by 3dBA.

**High Fidelity Models**

Genesis G4HF Series High Fidelity appliances provide highly intelligible voice audio output. They are also effective in areas subject to high levels of ambient noise. These appliances are approved for use in sleeping areas under conditions described below.

**Sleeping Room Applications**

Genesis G4HF Series High Fidelity appliances are ideal for hotels, dormitories, and other residential occupancies where audible output must meet the 520 Hz signaling characteristics required by NFPA 72.

In sleeping areas, always ensure that the wattage tap of the speaker is set sufficiently high so that the sound pressure reaches at least 75 dBA-fast at the pillow.

These appliances are part of an end-to-end audio system approved for use in sleeping areas when used in conjunction with approved audio hardware and a factory-supplied 520 Hz tone. Check the System Compatibility List for other 520 Hz signaling requirements.

**NOTE:** Speakers driven by third-party audio systems are not UL approved for use in sleeping rooms.

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**Strobe Application**

Genesis clear-lensed strobes are UL 1971-listed for use indoors as wall-mounted public-mode notification appliances for the hearing impaired. Prevaling codes require strobes to be used where ambient noise conditions exceed specified levels, where occupants use hearing protection, and in areas of public accommodation. UL 1638-listed colored-lensed strobe lights are available for mass notification applications. Consult with your Authority Having Jurisdiction for details.

When used with a compatible EDWARDS synchronization source, all Genesis xenon-based strobes — audible units, and combination appliances — remain fully synchronized indefinitely. This exceeds the UL synchronization requirements of 10 milliseconds over a two-hour period. Strobe light synchronization is important in order to avoid issues with people that have Photosensitive Epilepsy.

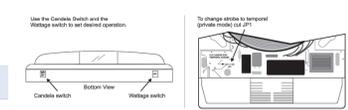
**Mass Notification Applications**

Genesis mass notification appliances bring the same high-performance life safety features and unobtrusive design to mass notification applications. Standard models are available with clear or amber lenses and optional ALERT housing labels, they are ideal for applications that require differentiation between life safety and mass notification alerts. Appliances with red, green or blue lenses are available. Contact EDWARDS Customer Service for details.

**Field Configuration**

Genesis speakers may be set for ¼, ½, 1, or 2 watt operation. The wattage setting is visible through a small window on the bottom of the device and is changed by simply sliding the switch until the desired setting appears in the window. The speaker does not have to be removed to change the wattage.

Genesis speaker-strobes feature selectable candela output. The output setting is visible through a small window on the bottom of the device and is changed by simply sliding the switch until the desired setting appears in the window. The speaker-strobe does not have to be removed to change the output.



Genesis speaker-strobes may also be configured for temporal flash. This battery-saving feature is intended for private mode signaling only. To set the device for temporal flash, snip the circuit board as shown in the Jumper Locations diagram above.

**WARNING:** These devices will not operate without electrical power. As fires frequently cause power interruptions, we suggest you discuss further safeguards with your local fire protection specialist.

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STAMP/SEALS



CONSTRUCTION DRAWINGS 31 JULY 2024

**MANUFACTURER DATA SHEETS FOR WALL SPEAKERS, SPEAKERS-STROBES**

PROJECT NO: 22-MPC-042 PROJECT ARCH: Designer  
DRAWN: Author CHECKED: Checker  
SHEET NUMBER

**E507**

DATE: 7/31/24 SHEET: OF

L.A.I.# 24-819 PAPER SIZE 42"x30"

TIME: 12:25 pm

DATE: 8 October 2024

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