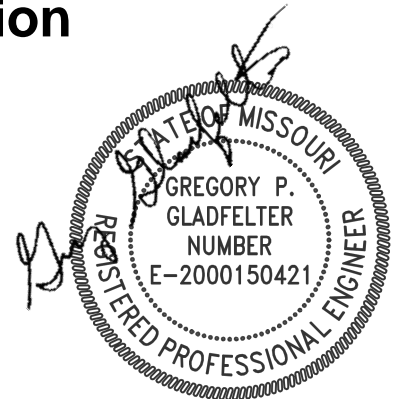


# Submittal Catalog

For

***J31 Dance Center  
2710 Independence Avenue  
Lee's Summit, MO 64064***

**Silent Knight  
Fire Alarm System Addition**



Prepared by:



1138 Kansas Avenue, Kansas City, Kansas 66105  
Tel: (913) 371-8494 • Fax: (913) 321-3457

03/25/2020

## Table of Contents

### Part Number

### Description

BG-12L

Manual Pull Station

SRL

Wall Mount Strobe, Red

P2RL

Wall Mount Horn/Strobe, Red

-----

Battery Calculations



**SILENT  
KNIGHT**

by Honeywell

## Model 5208 Fire Alarm Control Panel with Digital Communicator

**The Fire Alarm Control Designed to  
Grow with Your Systems Needs,  
Without The Growing Pains.**

The SK-5208 is a microprocessor based control panel with built-in UL listed communicator designed for applications requiring smoke detection, manual pull stations, and sprinkler supervision. It features an easy to read LCD display with programmable English readout and user friendly tactile keys. The basic unit offers 10 zones of initiation and is expandable up to 30 zones for larger applications. The SK-5208 has a complete line of supervised accessories that provide remote annunciation, auxiliary control zone expansion. Ideal for new and retrofit applications, the SK-5208 delivers the performance to handle your installation.

### Features

- 10 zones, 8 Class B (Style B) and 2 Class A (Style D) or Class B (Style B) zones, expandable to 30 zones
- Supervised zone expanders and I/O modules can be mounted remotely from the main control panel
- Event History Buffer (150 events) with date/time stamp
- All zones are compatible with 2- or 4-wire detectors
- 8 selectable/programmable output patterns for notification appliance circuits
- Built-in Digital Alarm Communicator Transmitter (DACT)
- 4 Notification Appliance Circuits
- 4 programmable general purpose relays
- Programmable smoke verification, pre-alarm delay, cross zoning and enhanced verification mode features that can help minimize false alarms
- Programmable from the built-in control panel touchpad, remote annunciator, or Windows® SKSS downloading software
- Direct connect port for on-site up/downloading with Windows® SKSS downloading software
- Built-in walk test feature
- Single or dual interlock water releasing capability
- Plex door option combines a dead front cabinet door with a clear window, limiting access to the panel while providing single button operation of the reset and silence functions
- Programmable AC trouble relay

- Built-in synchronization for appliances from AMSECO®, Gentex®, Faraday, System Sensor®, and Wheelock®
- Programmable date settings for Daylight Saving Time
- Clock source setting options for 50 Hz, 60 Hz, or internal (uses the panel's internal clock)

### Specifications

Operating Voltage:	24 VDC
Primary AC:	120 Vrms @ 60Hz, 2A
Total DC Load:	6 Amp
Current Draw:	
Standby:	140 mA
Alarm:	460 mA
Flush Mounting Dimensions:	
Height:	24.75" (62.9 cm)
Width:	14.5" (36.8 cm)
Depth:	3-7/16" (8.73 cm)
	with 5/8" protruding

Overall Dimensions:	
Height:	26-3/8" (67 cm)
Width:	17-3/16" (43.66 cm)
Total Depth:	4" (10.16 cm)
Operating Temp:	32° to 120° F (0° to 49° C)
Humidity:	10 - 93% noncondensing

### Optional Accessories

- SK-5235 LCD Remote Annunciator
- SK-5217 10 Zone Expander (2 max. per system)
- SK-5280 Status Display Module (8 max. per system)
- 5220 Direct Connect Module
- 5824 Serial/Parallel Printer Interface Module
- SKSS Downloading Software



**SK-5208**

- Plex-2 Door Option
- SK-SCK Seismic Compliance Kit

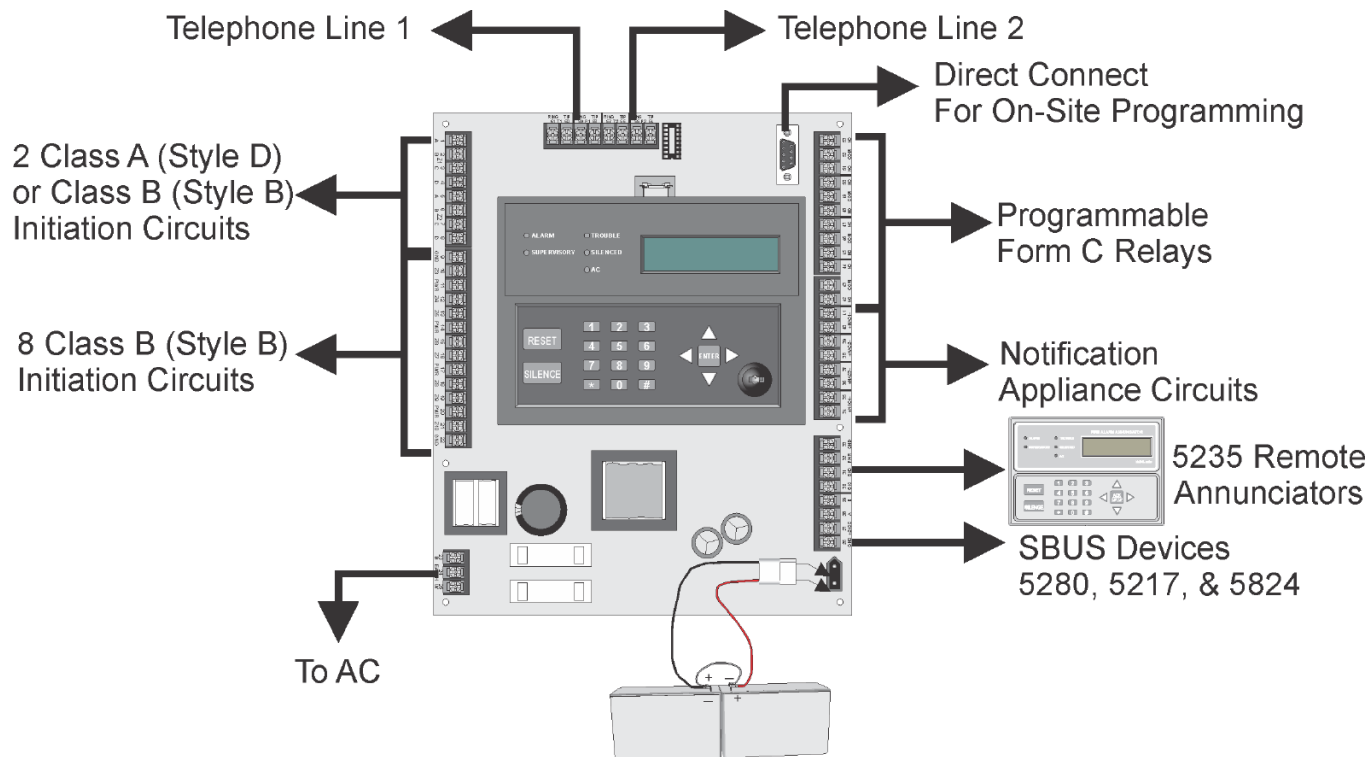
### Listings and Approvals

- UL Listed
- CSFM Listed
- MEA approval 429-92-E Vol. XIII
- OSHPD (CA) OSP-0065-10

# Model 5208 Fire Alarm Control Panel with Digital Communicator

## Engineering Specification

The system shall contain a fire alarm control panel to supervise and operate heat and smoke detection devices, manual fire alarm devices, alarm notification devices and visual annunciators. The system shall also be capable of monitoring for sprinkler supervisory and water flow conditions. The system must have a built in UL listed fire communicator that can be enabled/disabled as needed on a per job basis. In addition, the system will sound alarms locally for purpose of evacuation.



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610 Phone: (800) 328-0103, Fax: (203) 484-7118. For Technical support, Please call 800-446-6444.  
[www.silentknight.com](http://www.silentknight.com)

**MADE IN AMERICA**

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## Photoelectric Smoke Detectors

*System Sensor i<sup>3</sup>™ series smoke detectors represent significant advancement in conventional detection. The i<sup>3</sup> family is founded on three principles: installation ease, intelligence, and instant inspection.*



### Features

- Plug-in detector line, mounting base included
- Large wire entry port
- In-line terminals with SEMS screws
- Mounts to octagonal and single-gang back boxes, 4-square back boxes, or direct to ceiling
- Stop-Drop 'N Lock attachment to base
- Removable detector cover and chamber
- Built-in remote maintenance signaling
- Drift compensation and smoothing algorithms
- Simplified sensitivity measurement
- Wide-angle, dual-color LED indication
- Loop testing via EZ Walk feature
- Built-in test switch

**Installation ease.** The i<sup>3</sup> line redefines installation ease with its plug-in design. This allows an installer to pre-wire bases (included with heads). The large wire entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of back box mounting methods as well as direct mounting with drywall anchors. To complete the installation, i<sup>3</sup> heads plug into the base with a simple Stop-Drop 'N Lock™ action.

**Intelligence.** i<sup>3</sup> detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the i<sup>3</sup> line to minimize nuisance alarms. 2-wire i<sup>3</sup> detectors can generate a remote LED-indicated maintenance signal when connected to the 2W-MOD2 loop test/maintenance module or a panel equipped with the i<sup>3</sup> protocol. The SENS-RDR, a wireless device, displays the sensitivity of i<sup>3</sup> detectors in terms of percent-per-foot obscuration.

**Instant inspection.** The i<sup>3</sup> series provides wide-angle red and green LED indicators for instant inspection of the detector's condition: normal standby, out-of-sensitivity, alarm, or freeze trouble. When connected to the 2W-MOD2 loop test/maintenance module or a panel with the i<sup>3</sup> protocol, the EZ Walk loop test feature is available on 2-wire i<sup>3</sup> detectors. This feature verifies the initiating loop wiring by providing LED status indication at each detector.

### Agency Listings



S911



3011446



7272-1653:152



290-01-E



2093



3180932

## Smoke Detector Specifications

### Architectural/Engineering Specifications

Smoke detector shall be a System Sensor i<sup>3</sup> Series model number \_\_\_\_\_, listed to Underwriters Laboratories UL 268 for Fire Protection Signaling Systems. The detector shall be a photoelectric type (Model 2W-B, 4W-B) or a combination photoelectric/thermal (Model 2WT-B, 4WT-B) with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3½-inch and 4-inch octagonal, single-gang, and 4-inch square back boxes with a plaster ring, or direct mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5 percent-per-foot nominal as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms. The detector shall provide dual-color LED indication that blinks to indicate power up, normal standby, out of sensitivity, alarm, and freeze trouble (Model 2WT-B, 4WT-B) conditions. When used in conjunction with the 2W-MOD2 module, 2-wire models shall include a maintenance signal to indicate the need for maintenance at the alarm control panel and shall provide a loop testing capability to verify the circuit without testing each detector individually.

### Electrical Specifications

<b>Operating Voltage</b>	Nominal: 12/24 V non-polarized Minimum: 8.5 V Maximum: 35 V
<b>Maximum Ripple Voltage</b>	30% peak to peak of applied voltage
<b>Standby Current</b>	2-wire: 50 µA maximum average; 4-wire: 50 µA maximum average
<b>Maximum Alarm Current</b>	2-wire: 130 mA limited by control panel; 4-wire: 20 mA @ 12 V, 23 mA @ 24 V
<b>Peak Standby Current</b>	2-wire: 100 µA; 4-wire: n/a
<b>Alarm Contact Ratings</b>	2-wire: n/a; 4-wire: 0.5 A @ 30 V AC/DC

### Physical Specifications

<b>Dimensions (including base)</b>	5.3 inches (127 mm) diameter; 2.0 inches (51 mm) height
<b>Weight</b>	6.3 oz (178 g)
<b>Operating Temperature Range</b>	2W-B and 4W-B: 32°F to 120°F (0°C to 49°C); 2WT-B and 4WT-B: 32°F to 100°F (0°C to 37.8°C)
<b>Operating Humidity Range</b>	0 to 95% RH non-condensing
<b>Thermal Sensor</b>	135°F (57.2°C) fixed
<b>Freeze Trouble</b>	2WT-B and 4WT-B only: 41°F (5°C)
<b>Sensitivity</b>	2.5%/ft nominal
<b>Input Terminals</b>	14 to 22 AWG
<b>Mounting</b>	3½-inch octagonal back box 4-inch octagonal back box Single-gang back box 4-inch square back box with a plaster ring Direct mount to ceiling

LED Modes			Power-Up Sequence for LED Indication	
LED Mode	Green LED	Red LED	Condition	Duration
Power up	Blink every 10 seconds	Blink every 10 seconds	Initial LED status indication	80 seconds
Normal (standby)	Blink every 5 seconds	off		
Out of sensitivity	off	Blink every 5 seconds		
Freeze trouble	off	Blink every 10 seconds		
Alarm	off	Solid		

## Ordering Information

Model	Thermal	Wiring	Alarm Current
2W-B	No	2-wire	130 mA max. limited by control panel
2WT-B	Yes	2-wire	130 mA max. limited by control panel
4W-B	No	4-wire	20 mA @ 12 V, 23 mA @ 24 V
4WT-B	Yes	4-wire	20 mA @ 12 V, 23 mA @ 24 V

### Accessories

2W-MOD2	2-wire loop test / maintenance module	RT	Removal / replacement tool
SENS-RDR	Sensitivity reader	A77-AB2	Retrofit adapter bracket, 6.6 inch (16.76 cm) diameter



3825 Ohio Avenue • St. Charles, IL 60174  
Phone: 800-SENSOR2 • Fax: 630-377-6495

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A05-0318-007 • 6/09 • #2169

# BG-12 Series

## Manual Fire Alarm Pull Stations



### Conventional Initiating Devices

#### General

The Fire-Lite **BG-12 Series** is a cost-effective, feature-packed series of non-coded manual fire alarm pull stations. It was designed to meet multiple applications with the installer and end-user in mind. The BG-12 Series features a variety of models including single- and dual-action versions.

The BG-12 Series provides Fire-Lite Alarm Control Panels (FACPs), as well as other manufacturers' controls, with a manual alarm initiating input signal. Its innovative design, durable construction, and multiple mounting options make the BG-12 Series simple to install, maintain, and operate.

#### Features

- Aesthetically pleasing, highly visible design and color.
- Attractive contoured shape and light textured finish.
- Meets ADA 5 lb. maximum pull-force.
- Meets UL 38, Standard for Manually Actuated Signaling Boxes.
- Easily operated (single- or dual-action), yet designed to prevent false alarms when bumped, shaken, or jarred.
- PUSH IN/PULL DOWN handle latches in the down position to clearly indicate the station has been operated.
- The word "ACTIVATED" appears on top of the handle in bright yellow, further indicating operation of the station.
- Operation handle features white arrows showing basic operation direction for non-English-speaking persons.
- Braille text included on finger-hold area of operation handle and across top of handle.
- Multiple hex- and key-lock models available.
- U.S. patented hex-lock needs only a quarter-turn to lock/unlock.
- Station can be opened for inspection and maintenance without initiating an alarm.
- Product ID label viewable by simply opening the cover; label is made of a durable long-life material.
- The words "NORMAL" and "ACTIVATED" are molded into the plastic adjacent to the alarm switch (located inside).
- Four-position terminal strip molded into backplate.
- Terminal strip includes Phillips combination-head captive 8/32 screws for easy connection to Initiating Device Circuit (IDC).
- Terminal screws backed-out at factory and shipped ready to accept field wiring (up to 12 AWG/3.1 mm<sup>2</sup>).
- Terminal numbers are molded into the backplate, eliminating the need for labels.
- Switch contacts are normally open.
- Can be surface-mounted (with **SB-10** or **SB-I/O**) or semi-flush mounted. Semi-flush mount to a standard single-gang, double-gang, or 4" (10.16 cm) square electrical box.
- Backplate is large enough to overlap a single-gang backbox cutout by 1/2" (1.27 cm).
- Optional trim ring (**BG12TR**).
- Spanish versions (*FUEGO*) available (**BG-12LSP**, **BG-12LPSP**).
- Designed to replace the Fire-Lite legacy **BG-10** Series.
- Models packaged in attractive, clear plastic (PVC), clam-shell-style, Point-of-Purchase packages. Packaging includes a cutaway dust/paint cover in shape of pull station.



#### Construction

- Cover, backplate and operation handle are all molded of durable polycarbonate material.
- Cover features white lettering and trim.
- Red color matches System Sensor's popular SpectrAlert® Advance horn/strobe series.

#### Operation

The BG-12 manual pull stations provide a textured finger-hold area that includes Braille text. In addition to PUSH IN and PULL DOWN text, there are arrows indicating how to operate the station, provided for non-English-speaking people.

Pushing in and then pulling down on the handle activates the normally-open alarm switch. Once latched in the down position, the word "ACTIVATED" appears at the top in bright yellow, with a portion of the handle protruding at the bottom as a visible flag. Resetting the station is simple: insert the key, twist one quarter-turn, then open the station's front cover, causing the spring-loaded operation handle to return to its original position. The alarm switch can then be reset to its normal (non-alarm) position manually (by hand) or by closing the station's front cover, which automatically resets the switch.

## Specifications

### PHYSICAL SPECIFICATIONS:

	pull station	SB-I/O	SB-10
Height	5.5 inches (13.97 cm)	5.601 inches (14.23 cm)	5.5 inches (13.97 cm)
Width	4.121 inches (10.47 cm)	4.222 inches (10.72 cm)	4.121 inches (10.47 cm)
Depth	1.39 inches (3.53 cm)	1.439 inches (3.66 cm)	1.375 inches (3.49 cm)

52004dim.tbl

### ELECTRICAL SPECIFICATIONS:

**Switch contact ratings:** gold-plated; rating 0.25 A @ 30 VAC or VDC.

### ENGINEERING/ARCHITECTURAL SPECIFICATIONS

Manual Fire Alarm Stations shall be non-code, with a key- or hex-operated reset lock in order that they may be tested, and so designed that after actual Emergency Operation, they cannot be restored to normal except by use of a key or hex. An operated station shall automatically condition itself so as to be visually detected as activated. Manual stations shall be constructed of red colored LEXAN (or polycarbonate equivalent) with clearly visible operating instructions provided on the cover. The word **FIRE** shall appear on the front of the stations in white letters, 1.00 inches (2.54 cm) or larger. Stations shall be suitable for surface mounting on matching backbox SB-10 or SB-I/O; or semi-flush mounting on a standard single-gang, double-gang, or 4" (10.16 cm) square electrical box, and shall be installed within the limits defined by the Americans with Disabilities Act (ADA) or per national/local requirements. Manual Stations shall be Underwriters Laboratories listed.

**NOTE:** \*The words "FIRE/FUEGO" on the BG-12LSP shall appear on the front of the station in white letters, approximately 3/4" (1.905 cm) high.



## Agency Listings and Approvals

The listings and approvals below apply to the BG-12 Series pull stations. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **C(UL)US:** S711
- **FM Approved**
- **CSFM:** 7150-0075:184
- **MEA:** 67-02-E
- **Patented:** U.S. Patent No. D428,351; 6,380,846; 6,314,772; 6,632,108.

## Product Line Information

**BG-12S:** Single-action pull station with pigtail connections, hex lock.

**BG-12SL:** Same as BG-12 with key lock.

**BG-12:** Dual-action pull station with SPST N/O switch, screw terminal connections, **hex lock**.

**BG-12L:** Same as BG-12 with key lock.

**BG-12LSP:** Same as BG-12L with English/Spanish (**FIRE/FUEGO**) labeling.

**BG-12LOB:** Same as BG-12L with "outdoor use" listing. Includes outdoor listed backbox, and sealing gasket.

**BG-12LO:** Same as BG-12L with "outdoor use" listing. Does not include backbox.

**BG-12LA:** Same as BG-12L with auxiliary contacts.

**BG-12LPS:** Dual-action pull station with pre-signal option.

**BG-12LPSP:** Same as BG-12LPS with English/Spanish (**FIRE/FUEGO**) labeling.

**SB-10:** Surface-mount backbox, metal.

**SB-I/O:** Surface-mount backbox, plastic. (Included with BG-12LOB.)

**BG12TR:** Optional trim ring for semi-flush mounting.

**17003:** Keys, set of two. (Included with key-lock pull stations.)

**17007:** Hex lock, 9/64". (Included with hex-lock pull stations.)

**NOTE:** For addressable BG-12LX models, see data sheet DF-52013.

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Made in the U.S. A.

For more information, contact Fire-Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105.  
[www.firelite.com](http://www.firelite.com)





# Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications

*System Sensor L-Series audible visible notification products are rich with features guaranteed to cut installation times and maximize profits with lower current draw and modern aesthetics.*

## Features

- Updated Modern Aesthetics
- Small profile devices for Horns and Horn Strobes
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, and 185
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Mounting plate for all standard and all compact wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- Strobes and Horn Strobes listed for wall mounting only
- Horns listed for wall or ceiling use

## Agency Listings



**The System Sensor L-Series** offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draws and modern aesthetics. With white and red plastic housings, standard and compact devices, and plain, FIRE, and FUEGO-printed devices, System Sensor L-Series can meet virtually any application requirement.

The L-Series line of wall-mount horns, strobes, and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature plug-in designs with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time-consuming ground faults.

To further simplify installation and protect devices from construction damage, the L-Series utilizes a universal mounting plate for all models with an onboard shorting spring, so installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to a suit a wide range of application requirements using field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for horn tones with two volume selections.

# L-Series Specifications

## Architect/Engineer Specifications

### General

L-Series standard horns, strobes, and horn strobes shall mount to a standard 2 x 4 x 1<sup>7</sup>/<sub>8</sub>-inch back box, 4 x 4 x 1<sup>1</sup>/<sub>2</sub>-inch back box, 4-inch octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2 x 4 x 1<sup>7</sup>/<sub>8</sub>-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products for all standard models and a separate universal mounting plate shall be used for mounting wall compact models. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, and 185.

### Strobe

The strobe shall be a System Sensor L-Series Model \_\_\_\_\_ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

### Horn Strobe Combination

The horn strobe shall be a System Sensor L-Series Model \_\_\_\_\_ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

### Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize Strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4<sup>11</sup>/<sub>16</sub> x 4<sup>11</sup>/<sub>16</sub> x 2<sup>1</sup>/<sub>8</sub>-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

## Physical/Electrical Specifications

<b>Standard Operating Temperature</b>	32°F to 120°F (0°C to 49°C)
<b>Humidity Range</b>	10 to 93% non-condensing
<b>Strobe Flash Rate</b>	1 flash per second
<b>Nominal Voltage</b>	Regulated 12 DC or regulated 24 DC/FWR <sup>1</sup>
<b>Operating Voltage Range<sup>2</sup></b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
<b>Operating Voltage Range MDL3 Sync Module</b>	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
<b>Input Terminal Wire Gauge</b>	12 to 18 AWG
<b>Wall-Mount Dimensions (including lens)</b>	5.6" L x 4.7" W x 1.91" D (143 mm L x 119 mm W x 49 mm D)
<b>Compact Wall-Mount Dimensions (including lens)</b>	5.26" L x 3.46" W x 1.91" D (133 mm L x 88 mm W x 49 mm D)
<b>Horn Dimensions</b>	5.6" L x 4.7" W x 1.25" D (143 mm L x 119 mm W x 32 mm D)
<b>Compact Horn Dimensions</b>	5.25" L x 3.45" W x 1.25" D (133 mm L x 88 mm W x 32 mm D)

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

2. Strobe products will operate at 12 V nominal only for 15 cd and 30 cd.

## UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)				
Candela Range	Candela	8–17.5 Volts		
		DC	DC	FWR
Candela Range	15	88	43	60
	30	143	63	83
	75	N/A	107	136
	95	N/A	121	155
	110	N/A	148	179
	135	N/A	172	209
	185	N/A	222	257

UL Max. Horn Current Draw (mA RMS)				
Sound Pattern	dB	8–17.5 Volts		
		DC	DC	FWR
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

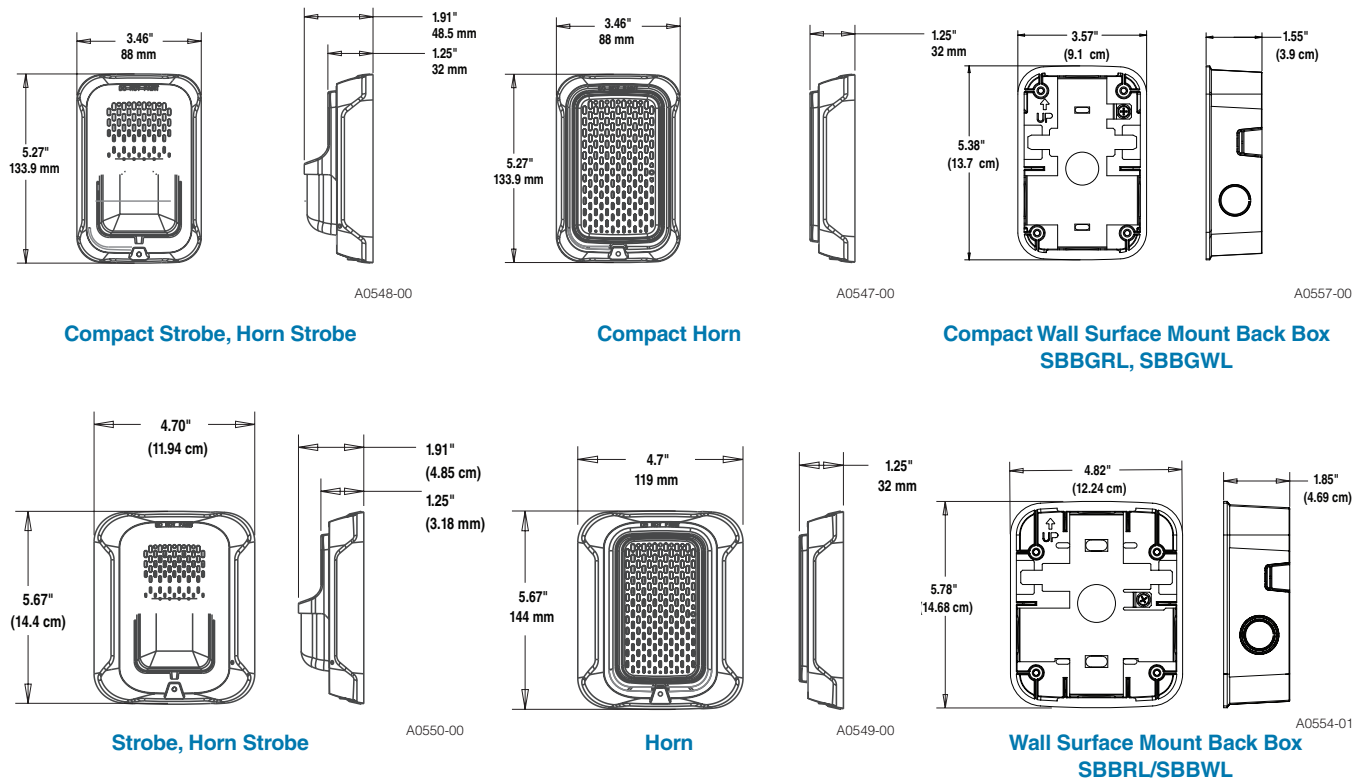
UL Max. Current Draw (mA RMS), Wall Horn Strobe, Candela Range (15–185 cd)									
DC Input	8–17.5 Volts		16–33 Volts						
	15cd	30cd	15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	98	158	54	74	121	142	162	196	245
Temporal Low	93	154	44	65	111	133	157	184	235
Non-Temporal High	106	166	73	94	139	160	182	211	262
Non-Temporal Low	93	156	51	71	119	139	162	190	239
3.1K Temporal High	93	156	53	73	119	140	164	190	242
3.1K Temporal Low	91	154	45	66	112	133	160	185	235
3.1K Non-Temporal High	99	162	69	90	135	157	175	208	261
3.1K Non-Temporal Low	93	156	52	72	119	138	162	192	242
FWR Input	16–33 Volts								
	15cd	30cd	75cd	95cd	110cd	135cd	185cd		
Temporal High	83	107	156	177	198	234	287		
Temporal Low	68	91	145	165	185	223	271		
Non-Temporal High	111	135	185	207	230	264	316		
Non-Temporal Low	79	104	157	175	197	235	283		
3.1K Temporal High	81	105	155	177	196	234	284		
3.1K Temporal Low	68	90	145	166	186	222	276		
3.1K Non-Temporal High	104	131	177	204	230	264	326		
3.1K Non-Temporal Low	77	102	156	177	199	234	291		

## Horn Tones and Sound Output Data

Horn and Horn Strobe Output (dBA)					
Switch Position	Sound Pattern	dB	8–17.5 Volts	16–33 Volts	FWR
			DC	DC	
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83
9*	Coded	High	85	90	90
10*	3.1 KHz Coded	High	84	89	89

\* Settings 9 and 10 are not available on 2-wire horn strobes. Temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output remains constantly on.

## L-Series Dimensions



## L-Series Ordering Information

Model	Description
<b>Wall Horn Strobes</b>	
P2RL	2-Wire, Horn Strobe, Red
P2WL	2-Wire, Horn Strobe, White
P2GRL	2-Wire, Compact Horn Strobe, Red
P2GWL	2-Wire, Comp 2 fils act Horn Strobe, White
P2RL-P	2-Wire, Horn Strobe, Red, Plain
P2WL-P	2-Wire, Horn Strobe, White, Plain
P2RL-SP	2-Wire, Horn Strobe, Red, FUEGO
P2WL-SP	2-Wire, Horn Strobe, White, FUEGO
P4RL	4-Wire, Horn Strobe, Red
P4WL	4-Wire, Horn Strobe, White
<b>Wall Strobes</b>	
SRL	Strobe, Red
SWL	Strobe, White
SGRL	Compact Strobe, Red
SGWL	Compact Strobe, White
SRL-P	Strobe, Red, Plain
SWL-P	Strobe, White, Plain
SRL-SP	Strobe, Red, FUEGO
SWL-CLR-ALERT	Strobe, White, ALERT

Model	Description
<b>Horns*</b>	
HRL*	Horn, Red
HWL*	Horn, White
HGRL*	Compact Horn, Red
HGWL*	Compact Horn, White
<b>Accessories</b>	
TR-2	Universal Wall Trim Ring Red
TR-2W	Universal Wall Trim Ring White
SBBRL	Wall Surface Mount Back Box, Red
SBBWL	Wall Surface Mount Back Box, White
SBBGRL	Compact Wall Surface Mount Back Box, Red
SBBGWL	Compact Wall Surface Mount Back Box, White

### Notes:

All -P models have a plain housing (no "FIRE" marking on cover).  
 All -SP models have "FUEGO" marking on cover.  
 All -ALERT models have "ALERT" marking on cover.  
 \*Horn-only models are listed for wall or ceiling use.



3825 Ohio Avenue • St. Charles, IL 60174  
 Phone: 800-SENSOR2 • Fax: 630-377-6495  
[www.systemsensor.com](http://www.systemsensor.com)

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 Product specifications subject to change without notice. Visit [systemsensor.com](http://www.systemsensor.com)  
 for current product information, including the latest version of this data sheet.  
 AVDS865-05 • 2/22/2018



# SILENT KNIGHT

SK-5208 Calculations  
Version 02.26.09

Global Project Values:

Project Name:   
Project ID:   
Prepared By:   
Date:

Standby Hours:   
Alarm Mins:   
Derating Factor:   
Voltage Drop Warning  
Threshold %:

Panel ID:   
Location:

Model: SK-5208 Fire Alarm Control Panel  
Volts: 24 VDC

Max NAC Current: 3.0 Amps  
Max Panel Current: 6.0 Amps

Ckt.#	Circuit Name	Qty	Current Draw		Wire AWG & Type	Ohms Per 1000 Ft.	Length(ft) One-Way	Actual Ohms	Volts @ EOL	%Drop
			Standby	Alarm						
SK-5208	SK-5208 Main Control	1	0.140	0.550						
SK-5217	SK-5217 Zone Expdr		0.000	0.000						
SK-5235	SK-5235 LCD Remote		0.000	0.000						
SK-5280	SK-5280 Display Mod		0.000	0.000						
SK-5220	SK-5220 Dir Con Mod		0.000	0.000						
SK-7181	SK-7181 Zn Cnvtr		0.000	0.000						
IDC-1	Initiating Device Ckt 1		0.000	NA**						
IDC-2	Initiating Device Ckt 2		0.000	NA**						
IDC-3	Initiating Device Ckt 3		0.000	NA**						
IDC-4	Initiating Device Ckt 4		0.000	NA**						
IDC-5	Initiating Device Ckt 5		0.000	NA**						
IDC-6	Initiating Device Ckt 6		0.000	NA**						
IDC-7	Initiating Device Ckt 7		0.000	NA**						
IDC-8	Initiating Device Ckt 8		0.000	NA**						
IDC-9	Initiating Device Ckt 9		0.000	NA**						
IDC-10	Initiating Device Ckt 10		0.000	NA**						
IDC-11	Inactive, Add SK-5217		0.000	NA**						
IDC-12	Inactive, Add SK-5217		0.000	NA**						
IDC-13	Inactive, Add SK-5217		0.000	NA**						
IDC-14	Inactive, Add SK-5217		0.000	NA**						
IDC-15	Inactive, Add SK-5217		0.000	NA**						
IDC-16	Inactive, Add SK-5217		0.000	NA**						
IDC-17	Inactive, Add SK-5217		0.000	NA**						
IDC-18	Inactive, Add SK-5217		0.000	NA**						
IDC-19	Inactive, Add SK-5217		0.000	NA**						
IDC-20	Inactive, Add SK-5217		0.000	NA**						
IDC-21	Inactive, Add SK-5217		0.000	NA**						
IDC-22	Inactive, Add SK-5217		0.000	NA**						
IDC-23	Inactive, Add SK-5217		0.000	NA**						
IDC-24	Inactive, Add SK-5217		0.000	NA**						
IDC-25	Inactive, Add SK-5217		0.000	NA**						
IDC-26	Inactive, Add SK-5217		0.000	NA**						
IDC-27	Inactive, Add SK-5217		0.000	NA**						
IDC-28	Inactive, Add SK-5217		0.000	NA**						
IDC-29	Inactive, Add SK-5217		0.000	NA**						
IDC-30	Inactive, Add SK-5217		0.000	NA**						
NAC-1	Notification Appl Ckt 1		0.000	0.666	#14 Stranded	2.52		0.00	20.40	0.00%
NAC-2	Notification Appl Ckt 2		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
NAC-3	Notification Appl Ckt 3		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
NAC-4	Notification Appl Ckt 4		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
Aux	Aux Power Out		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
Total Standby Current (Amps)			0.140	1.216	Total Alarm Current (Amps)					
Standby Time In Hours			24	0.083	Alarm Time In Minutes / 60 (5 Mins)					
Total Standby AH Required			3.360	0.101	Total Alarm AH Required					
Total Combined AH Required			3.46		<b>Command Shortcuts</b>					
Multiply By The Derating Factor			1.20							
Minimum Battery AmpHours Required			4.15							

[Configure Circuits](#)

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\*\* The SK-5208 and SK-5217 limits alarm current to 95mA per zone. The SK-5208 alarm current includes 10% of system zones in alarm, but in no case less than three zones per UL 864.

**GENERAL ELECTRICAL NOTES**

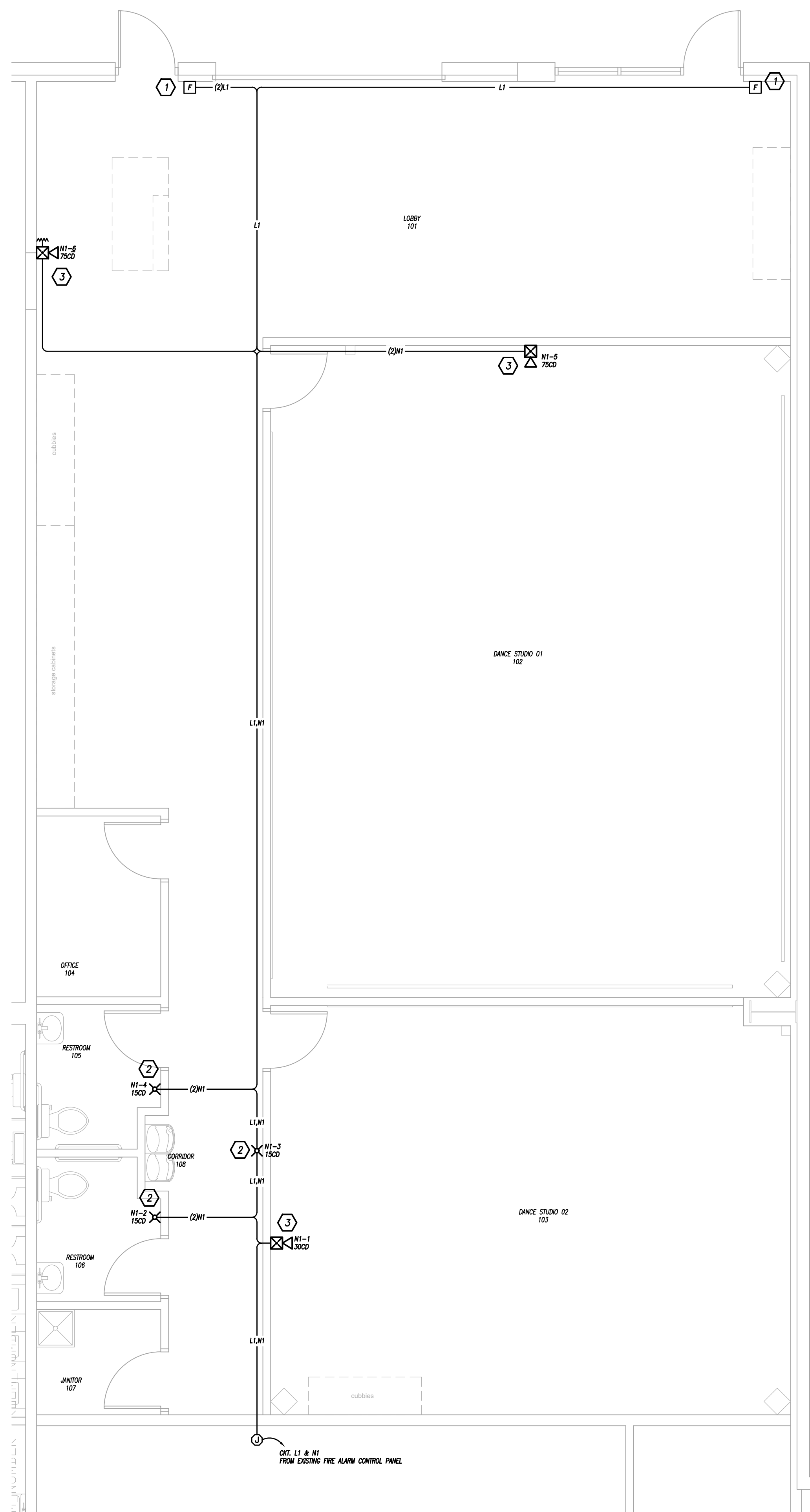
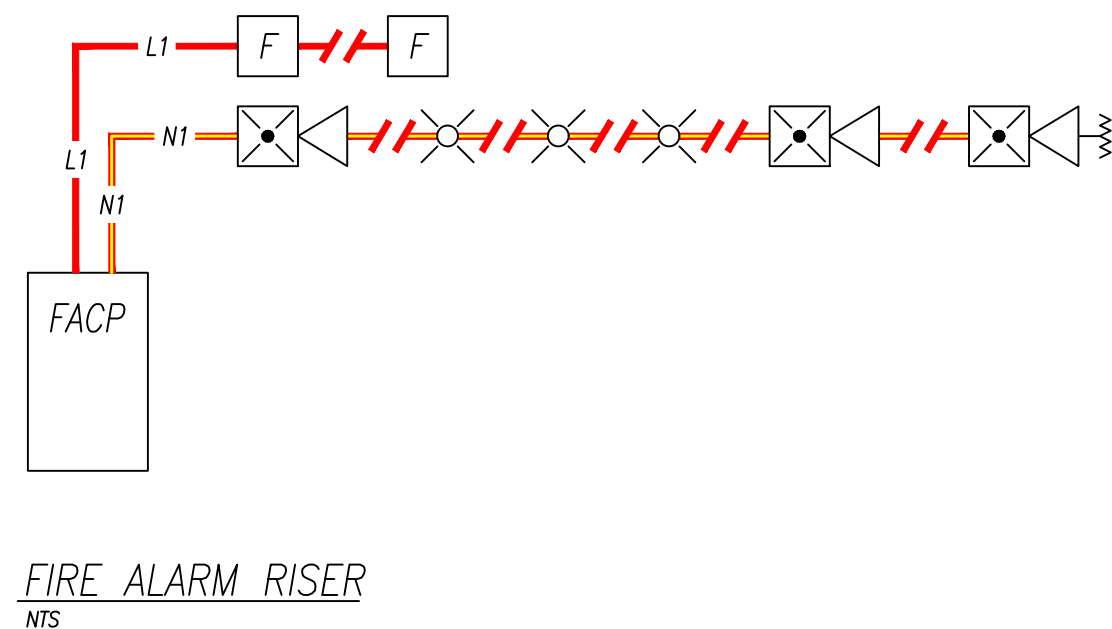
- FIRE ALARM SYSTEM SHALL BE INSTALLED AND TESTED IN STRICT ACCORDANCE WITH NFPA 72, NATIONAL FIRE ALARM CODE, AS WELL AS STATE AND LOCAL BUILDING CODES AND STANDARDS, INCLUDING, BUT NOT LIMITED, TO (IBC) INTERNATIONAL BUILDING CODE, 2012 EDITION.
- FIRE ALARM CONDUCTORS AND CABLES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH NFPA 70, NATIONAL ELECTRICAL CODE AND SPECIFICALLY WITH ARTICLES 760, 770 AND 800, WHERE APPLICABLE. OPTICAL FIBER CABLES SHALL BE PROTECTED AGAINST MECHANICAL INJURY IN ACCORDANCE WITH ARTICLE 760.
- FIRE ALARM CONDUCTORS AND CABLES SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. CONDUCTORS AND CABLES SHALL BE SUPPORTED BY THE BUILDING STRUCTURE IN SUCH A MANNER THAT THE CABLE WILL NOT BE DAMAGED BY NORMAL BUILDING USE.
- THE INSTALLING ELECTRICAL CONTRACTOR MUST PROVIDE THE FIRE ALARM CONTRACTOR (KELLER FIRE & SAFETY) WITH ACCURATE MARKED UP DRAWINGS SHOWING ALL JUNCTION BOXES, TERMINAL CABINETS, DEVICE LOCATIONS, WIRE ROUTING, ETC. FOR THE USE IN MAKING OF "RECORD DRAWINGS". FINAL PAYMENT WILL NOT BE AUTHORIZED UNTIL THE RECORD DOCUMENTS HAVE BEEN RECEIVED AND APPROVED.
- CONDUIT ROUTING AND CONDUIT SIZE SHALL BE DETERMINED BY THE CONTRACTOR, IN CONJUNCTION WITH NFPA 70 (NEC), AND INDICATED ON THE RECORD DRAWINGS. CONDUIT FILL SHALL NOT EXCEED 40%.
- PRIMARY POWER SOURCE (120VAC) TO FACP AND POWER SUPPLIES MUST BE ON A DEDICATED BRANCH CIRCUIT FROM THE EMERGENCY GENERATOR (IF APPLICABLE), WITH DISCONNECTING MEANS MARKED "FIRE ALARM CONTROL CIRCUIT". THE LOCATION OF THE DISCONNECT MUST BE IDENTIFIED AT THE FACP AND ALL POWER SUPPLIES. ALL FIRE ALARM CIRCUIT BREAKERS MUST BE CLEARLY MARKED AND MECHANICALLY SECURED TO PREVENT ANY UNAUTHORIZED TAMPERING.
- DEVICE POLARITY MUST BE OBSERVED ON ALL DC CIRCUITS (SLC), IDC, NAC, AND AUXILIARY POWER).
- ALL INITIATING AND NOTIFICATION CIRCUIT WIRING MUST BE SUPERVISED.
- ALL WIRING, INCLUDING SHIELDS, MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
- INITIATING DEVICES SHALL BE SUPPORTED INDEPENDENTLY OF THEIR ATTACHMENT TO FIRE ALARM CIRCUIT CONDUCTORS.
- FIRE ALARM CIRCUITS SHALL BE IDENTIFIED AT TERMINAL AND JUNCTION LOCATIONS, IN A MANNER THAT WILL PREVENT UNINTENTIONAL INTERFERENCE WITH THE SIGNALING LINE CIRCUIT (SLC) DURING TESTING AND SERVICING (NEC ARTICLE 760-10).
- SMOKE DETECTORS SHALL BE MOUNTED IN ACCORDANCE WITH NFPA 72. DETECTORS SHALL NOT BE LOCATED IN A DIRECT AIR FLOW NOR CLOSER THAN 3 FEET (1 METER) FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. FURTHER, DETECTORS SHALL NOT BE INSTALLED WITHIN 1 FOOT OF LIGHT FIXTURES.
- DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEANUP OF ALL TRADES IS COMPLETE AND FINAL.
- ALL FIRE ALARM DEVICES MUST BE INSTALLED IN A PROPER BACK BOX. NO DEVICE SHALL BE INSTALLED WITHOUT A BACK BOX.
- POWER-LIMITED FIRE ALARM CIRCUIT CONDUCTORS AND CABLES (NEC ARTICLE 760-71) SHALL BE INSTALLED AS FOLLOWS:
  - IN RACEWAY OR EXPOSED ON THE SURFACE OF CEILING AND SIDE WALLS OR "TISHED" IN CONCEALED SPACES. CABLE SPLICES OR TERMINATIONS SHALL BE MADE IN LISTED FITTINGS, BOXES ENCLOSURES, FIRE ALARM DEVICES, OR UTILIZATION EQUIPMENT. WHERE INSTALLED EXPOSED, CABLES SHALL BE ADEQUATELY SUPPORTED AND INSTALLED IN SUCH A WAY THAT MAXIMUM PROTECTION AGAINST PHYSICAL DAMAGE IS AFFORDED BY BUILDING CONSTRUCTION SUCH AS BASEBOARDS, DOOR FRAMES, LEDGES, ETC. WHERE LOCATED WITHIN 7 FEET (2.13 METERS) OF THE FLOOR, CABLES SHALL BE SECURELY FASTENED IN AN APPROVED MANNER AT INTERVALS OF NOT MORE THAN 18 INCHES.
  - IN METAL RACEWAYS OR RIGID NONMETALLIC CONDUIT WHERE PASSING THROUGH A FLOOR OR WALL TO A HEIGHT OF 7 FEET (2.13 METERS) ABOVE THE FLOOR, UNLESS ADEQUATE PROTECTION CAN BE AFFORDED BY BUILDING CONSTRUCTION SUCH AS DETAILED IN (A) ABOVE, OR UNLESS AN EQUIVALENT SOLID GUARD IS PROVIDED.
  - IN RIGID METAL CONDUIT, RIGID NONMETALLIC CONDUIT, INTERMEDIATE METAL CONDUIT, OR ELECTRICAL METALLIC TUBING WHERE INSTALLED IN HOSTWAYS. (EXCEPTION: AS PROVIDED IN NEC SECTION 620-71 FOR ELEVATORS AND SIMILAR EQUIPMENT)
- ALL DEVICES SHALL BE LABELED WITH THEIR ADDRESS OR CIRCUIT NUMBER.
- POWER-LIMITED CIRCUIT CABLES AND CONDUCTORS SHALL NOT BE PLACED IN ANY CABLE, CABLE TRAY, COMPARTMENT, ENCLOSURE, OUTLET BOX, RACEWAY, OR SIMILAR FITTING WITH CONDUCTORS OF ELECTRIC LIGHT, POWER, CLASS 1 NONPOWER-LIMITED FIRE ALARM CIRCUIT CONDUCTORS, OR MEDIUM POWER NETWORK-POWER BOARD BAND COMMUNICATIONS CIRCUITS (NEC ARTICLE 760-54).
- POWER-LIMITED CIRCUIT CONDUCTORS SHALL NOT BE STRAPPED, TAPED OR ATTACHED BY ANY MEANS TO THE EXTERIOR OF ANY CONDUIT OR OTHER RACEWAY AS A MEANS OF SUPPORT.
- INITIATING DEVICE CIRCUITS (IDC) AND NOTIFICATION APPLIANCE CIRCUITS (NAC), ARE TWO WIRE CLASS "B". NO "T-TAPPING" IS ALLOWED ON ANY OF THESE CIRCUITS.
- AUXILIARY POWER CIRCUITS ARE TWO WIRE CIRCUITS THAT CAN BE T-TAPPED AS REQUIRED.
- SIGNALING LINE CIRCUITS (SLC) DESIGNATED AS CLASS "B" ARE TWO WIRE DATA COMMUNICATIONS CIRCUITS. T-TAPPING IS ALLOWED ONLY AT JUNCTION BOXES AND SLC DEVICES, BUT SHALL BE KEPT TO A MINIMUM.
- SIGNALING LINE CIRCUITS (SLC) DESIGNATED AS CLASS "A" ARE TWO WIRE DATA COMMUNICATIONS CIRCUITS. NO T-TAPPING IS PERMITTED. THE OUTGOING AND RETURN CONDUCTORS OF A CLASS "A" CIRCUIT, EXITING FROM AND RETURNING TO THE CONTROL UNIT, RESPECTIVELY, MUST BE ROUTED SEPARATELY. THE OUTGOING AND RETURN (REDUNDANT) CIRCUIT CONDUCTORS SHALL NOT BE RUN IN THE SAME CABLE ASSEMBLY, ENCLOSURE, OR RACEWAY. THE OUTGOING AND RETURN CIRCUIT CONDUCTORS SHALL BE PERMITTED TO BE RUN IN THE SAME CABLE ASSEMBLY, ENCLOSURE, OR RACEWAY ONLY UNDER THE FOLLOWING CONDITIONS:
  - FOR A DISTANCE OF 10 FEET (3 METERS) WHERE THE OUTGOING AND RETURN CONDUCTORS ENTER OR EXIT THE INITIATING DEVICE, NOTIFICATION APPLIANCE, OR CONTROL UNIT ENCLOSURES.
  - SINGLE CONDUIT/RACEWAY DROPS (UNLIMITED LENGTH) TO INDIVIDUAL DEVICES OR APPLIANCES.
  - SINGLE CONDUIT/RACEWAY DROPS TO MULTIPLE DEVICES OR APPLIANCES INSTALLED WITH A SINGLE ROOM NOT EXCEEDING 1000 FEET (92.9 METERS) IN AREA.
- OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE-RESISTANT/RATED WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS TO MAINTAIN THE FIRE RESISTANCE RATING.

**GENERAL NOTES**

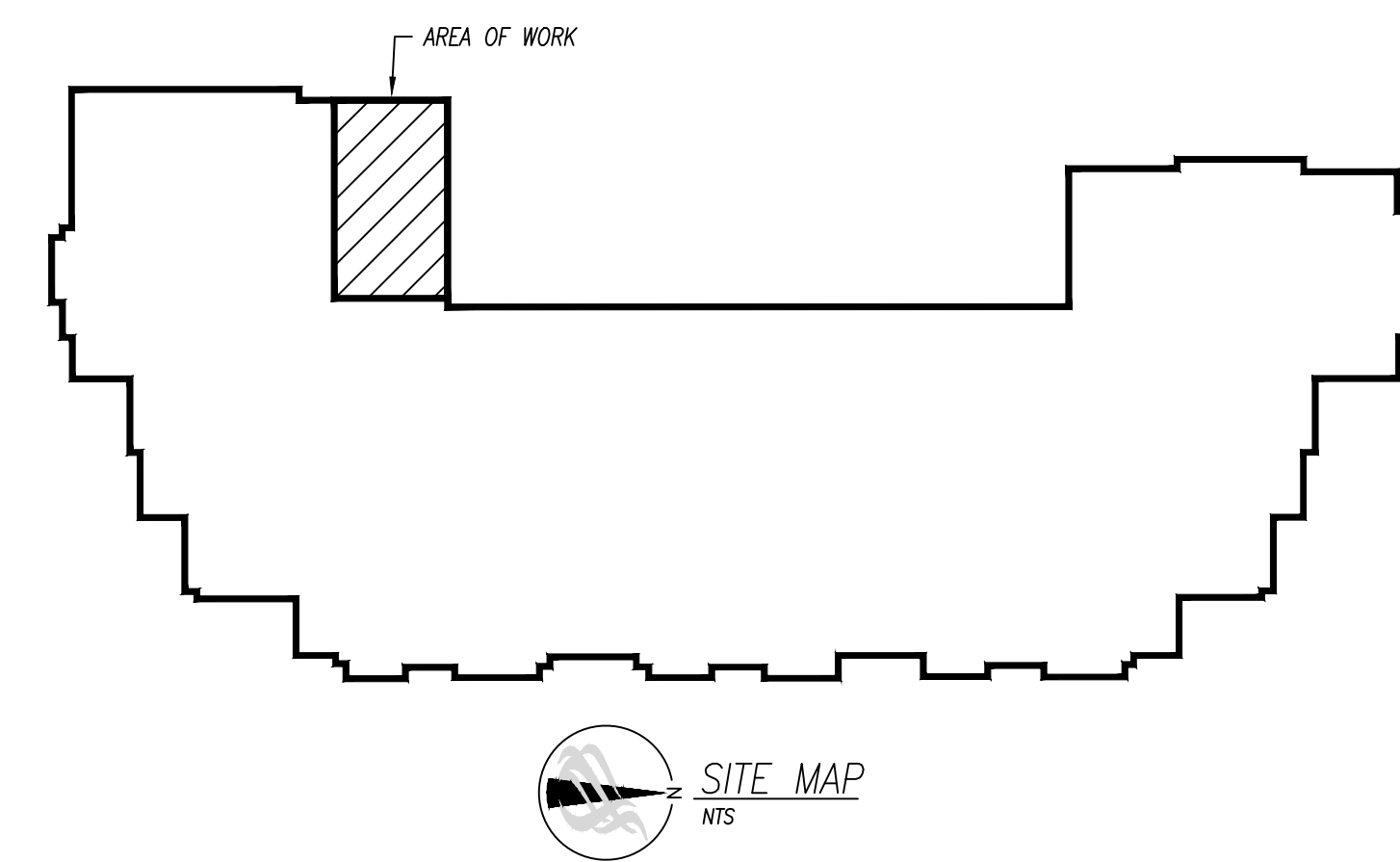
- DRAWINGS ARE SCHEMATIC BY NATURE AND MAY NOT REFLECT EXACT FIELD LOCATIONS. UPON COMPLETION OF INSTALLATION "AS-BUILT" DRAWINGS ARE REQUESTED FOR FINAL RECORD DOCUMENTATION.
- EXISTING FIRE ALARM SYSTEM SHALL REMAIN. CONNECT NEW FIRE ALARM EQUIPMENT TO EXISTING SYSTEM AS SHOWN FOR PROPER FUNCTION.

**KEYED NOTES**

- NEW MANUAL PULL STATION. CONNECT TO EXISTING FIRE ALARM CONTROL PANEL INITIATING DEVICE CIRCUIT (CIRCUIT TYPE L1) FOR PROPER FUNCTION.
- NEW WALL MOUNT STROBE. CONNECT TO EXISTING FIRE ALARM CONTROL PANEL NOTIFICATION APPLIANCE CIRCUIT (CIRCUIT TYPE N1) FOR PROPER FUNCTION.
- NEW WALL MOUNT HORN/STROBE. CONNECT TO EXISTING FIRE ALARM CONTROL PANEL NOTIFICATION APPLIANCE CIRCUIT (CIRCUIT TYPE N1) FOR PROPER FUNCTION.



**FIRE ALARM ELECTRICAL PLAN**  
1/4"=1'-0"



**EQUIPMENT SCHEDULE**

SYMBOL	QTY	PART NUMBER	MFG	BACKBOX	MOUNTING HEIGHT	DESCRIPTION
[FACB]	1	SK-5208	SILENTKNIGHT	SUPPLIED	72" A.F.F. TO TOP OF CABINET	CONVENTIONAL FIRE ALARM CONTROL PANEL, EXISTING
[ ]	2	N/A	N/A	N/A	N/A	12V 7AH BATTERY, EXISTING
[ ]	2	BC-12L	FIRELITE	4" SQUARE, 2.5"D	44" A.F.F. TO BOTTOM OF BOX	MANUAL PULL STATION
[X]	3	SRL	SYSTEMSENSOR	4" SQUARE, 2.5"D	84" A.F.F. TO BOTTOM OF BOX	WALL MOUNT STROBE, RED
[X]	3	FRL	SYSTEMSENSOR	4" SQUARE, 2.5"D	84" A.F.F. TO BOTTOM OF BOX	WALL MOUNT HORN/STROBE, RED

**CIRCUIT SCHEDULE**

CIRCUIT	CABLE/WIRE DESCRIPTION	FUNCTION	REMARKS
L1	16AWG 2-CONDUCTOR P/PLP, WINNY CITY WIRE #16X360 (OR EQUIV.)	SIGNALING LINE CIRCUIT	INITIATING DEVICES (RED JACKET, RED STRIPE)
N1	14AWG 2-CONDUCTOR P/PLP, WINNY CITY WIRE #14X763 (OR EQUIV.)	NOTIFICATION CIRCUIT	VISUAL DEVICES (RED JACKET, YELLOW STRIPE)

**SILENT KNIGHT**  
SK-5208 Calculations  
Version 02.20.09

Panel ID: SK-5208 Model: SK-5208 Fire Alarm Control Panel  
Location: Volts: 24 VDC Max NAC Current: 3.0 Amps Max Panel Current: 6.0 Amps

Ckt.#	Circuit Name	Qty	Current Draw	Wire AWG & Type	Ohms Per 1000 Ft. One-Way	Length (ft)	Actual Ohms	Volts @ EOL	%Drop
SK-5208	SK-5208 Main Control	1	0.140	0.550					
SK-5217	SK-5217 Zone Expdr	0	0.000	0.000					
SK-5238	SK-5238 LCU Remote	0	0.000	0.000					
SK-5280	SK-5280 Display Mod	0	0.000	0.000					
SK-5290	SK-5290 Dr Con Mod	0	0.000	0.000					
SK-7181	SK-7181 Zn Crwr	0	0.000	0.000					
IDC-1	Initiating Device Ckt 1	0	0.000	NA**					
IDC-2	Initiating Device Ckt 2	0	0.000	NA**					
IDC-3	Initiating Device Ckt 3	0	0.000	NA**					
IDC-4	Initiating Device Ckt 4	0	0.000	NA**					
IDC-5	Initiating Device Ckt 5	0	0.000	NA**					
IDC-6	Initiating Device Ckt 6	0	0.000	NA**					
IDC-7	Initiating Device Ckt 7	0	0.000	NA**					
IDC-8	Initiating Device Ckt 8	0	0.000	NA**					
IDC-9	Initiating Device Ckt 9	0	0.000	NA**					
IDC-10	Initiating Device Ckt 10	0	0.000	NA**					
IDC-11	Inactive, Add SK-5217	0	0.000	NA**					
IDC-12	Inactive, Add SK-5217	0	0.000	NA**					
IDC-13	Inactive, Add SK-5217	0	0.000	NA**					
IDC-14	Inactive, Add SK-5217	0	0.000	NA**					
IDC-15	Inactive, Add SK-5217	0	0.000	NA**					
IDC-16	Inactive, Add SK-5217	0	0.000	NA**					
IDC-17	Inactive, Add SK-5217	0	0.000	NA**					
IDC-18	Inactive, Add SK-5217	0	0.000	NA**					
IDC-19	Inactive, Add SK-5217	0	0.000	NA**					
IDC-20	Inactive, Add SK-5217	0	0.000	NA**					
IDC-21	Inactive, Add SK-5217	0	0.000	NA**					
IDC-22	Inactive, Add SK-5217	0	0.000	NA**					
IDC-23	Inactive, Add SK-5217	0	0.000	NA**					
IDC-24	Inactive, Add SK-5217	0	0.000	NA**					
IDC-25	Inactive, Add SK-5217	0	0.000	NA**					
IDC-26	Inactive, Add SK-5217	0	0.000	NA**					
IDC-27	Inactive, Add SK-5217	0	0.000	NA**					
IDC-28	Inactive, Add SK-5217	0	0.000	NA**					
IDC-29	Inactive, Add SK-5217	0	0.000	NA**					
IDC-30	Inactive, Add SK-5217	0	0.000	NA**					
NAC-1	Notification Appl Ckt 1	0	0.000	#14 Stranded	2.52		0.00	20.48	0.00%
NAC-2	Notification Appl Ckt 2	0	0.000	#12 Solid	1.59		0.00	20.40	0.00%
NAC-3	Notification Appl Ckt 3	0	0.000	#12 Solid	1.59		0.00	20.40	0.00%
NAC-4	Notification Appl Ckt 4	0	0.000	#12 Solid	1.59		0.00	20.40	0.00%
Aux	Aux Power Ckt	0	0.000	#12 Solid	1.59		0.00	20.40	0.00%
Total Standby Current (Amps)			0.140	Total Alarm Current (Amps)					
Standby Time in Hours			24	Alarm Time in Minutes (5 Mins)					
Total Standby AH Required			3.360	Total Alarm AH Required					
Total Combined AH Required			3.360	Command Shortcuts					
Multiply By The Derating Factor			1.20	Minimum Battery Amperhours Required					
			<b>4.032</b>						

Configure Circuits Print Page

\*\* The SK-5208 and SK-5217 limits alarm current to 95mA per zone. The SK-5208 alarm current includes 10% of system zones in alarm, but in no case less than three zones per UL 864.

**KELLER FIRE & SAFETY**  
FIRE & SAFETY  
KANSAS CITY, MISSOURI 64105  
TEL: (816) 371-8888  
FAX: (816) 371-8888

DESIGNED BY: AJS  
DRAWN BY: AJS  
CHECKED BY: JH  
PROJECT ENGINEER: BC

ISSUED DATE: 3/25/2020  
PROJECT MANAGER: JH

PROJECT NUMBER: FA100  
1 OF 1 SHEETS

DATE: 298378

NO DATE

REVISION

CHKD

DRWN

PROJECT TITLE: FIRE ALARM PLAN AND DETAILS

CUSTOMER: J31 DANCE CENTER  
2710 INDEPENDENCE AVENUE  
LEE'S SUMMIT, MO 64064

PRODUCT TITLE: TENANT FINISH FIRE ALARM ADDITION

11032 S Green Rd  
Overland, MO 64065  
913-266-9881  
913-266-9392

700 Bryant Court West  
Lee's Summit, MO 64086  
913-266-3100  
913-266-3102