



Permitting and Inspections Department

### Fire Alarm Permit Application

Construction Address: <b>550 Forest Ave.</b>		
Total Square Footage of Proposed Structure: <b>7100</b>		
Tax Assessor's Chart, Block & Lot Chart# <input type="text"/> Block# <input type="text"/> Lot# <input type="text"/>		Applicant Name: <b>Norris Inc.</b>
Cost of Work: \$ <b>5,000</b>		Address: <b>2257 West Broadway South Portland, ME. 04106</b>
Lessee/Owner Name (if different): <b>SSA Realty c/o Dirigo Management</b>		Phone: <b>207-883-3473</b>
Address: <b>One City Center Portland, ME. 04101</b>		Email: <b>melissap@norrisinc.com</b>
Phone: <b>871-1080</b>		Contractor Name (if different): <b>same</b>
Email: <b>gary@digirogmt.com</b>		Address: <input type="text"/>
Current use (i.e. single family): <b>n/a</b>		
If vacant, what was the previous use? <b>SSA</b>		
Proposed specific use: <b>United Way</b>		
Is property part of a subdivision? If yes, name: <b>No</b>		
Project description: <b>add, remove and relocate devices as needed for United Way reno</b>		
Life Safety Code Occupancy Classification: <b>existing office, new assembly</b>		
Is this new work or a renovation to an existing system? <b>reno</b>		
Is the top occupiable floor of the building greater than 75 feet above the lowest level of Fire Department access (high-rise)? <input type="checkbox"/> <b>NO</b>		
Name of company providing programming and certification of system*: <b>Norris Inc</b>		
Electrical permit #: <b>ERC-2020-02513</b>		
<b>Will a master box be installed?    <input type="radio"/> Yes    <input checked="" type="radio"/> No    If yes, complete all items for approval):</b>		
AES approved installing contractor: <input type="text"/>		
Documentation of AES approval: <input type="text"/>		
Property Owner: <input type="text"/>		
Property Owner Billing Address: <input type="text"/>		
Property common name: <input type="text"/>		
E-911 address for protected premises: <input type="text"/>		
Emergency contact phone: <input type="text"/> Additional emergency contact phone: <input type="text"/>		
Number of stories protected: <input type="text"/>		
Is the building protected by a supervised, automatic sprinkler system? <input type="radio"/> Yes <input checked="" type="radio"/> No		
Name of person to contact when the permit is ready: <b>Norris Inc-- Melissa Peter</b>		
Address: <b>same as above</b>		
City, State & Zip: <input type="text"/>		
Email Address: <b>melissap@norrisinc.com</b>		Phone: <input type="text"/>

\*For a list of approved fire alarm companies, see [www.portlandmaine.gov/1486/Approved-Fire-Alarm-Companies](http://www.portlandmaine.gov/1486/Approved-Fire-Alarm-Companies)



# Norris Inc.

PO Box 2551  
2257 West Broadway  
South Portland, ME 04106

1-800-370-3473  
Fax 207-879-0540



[Please complete this form and return to Norris Inc.](#)

## Building Owner Information Form

**Job Name:**

**Project #**

**Electrical Contractor:**

# NFPA requires this information for proper documentation.

**The contractor must provide all of the requested information below before ANY equipment can be released.**

**Electrical Contractor Contact:**

**Estimated Date Equip. Needed:**

**Estimated Finals Date:**

**Building Owner:**

**Job Site Address:**

**City:**

**State:**

**Zip:**

**Customer Contact:**

**Phone:**



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[www.norrisinc.com](http://www.norrisinc.com)



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April 30, 2020

**Thank you for your cooperation.**

**Please advise the building owners that if this system is equipped with a digital communicator,  
then they MUST also make monitoring arrangements prior to a certificate of occupancy.**

**Norris Inc will attempt to contact the building owners.**



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April 03, 2020

# **STOP!**

**THIS COPY IS FOR YOUR ELECTRICIAN  
ON THE JOBSITE**

**PLEASE BE SURE THIS COPY IS FORWARDED**

- 1.) A riser diagram is enclosed. DO NOT USE THE ENGINEER'S RISER SHOWN ON THE PLANS. If there is any information that you question, call us immediately.**
- 2.) YOU MUST CALL AT LEAST FIVE DAYS IN ADVANCE TO SCHEDULE FINAL CONNECTION ASSISTANCE.**
- 3.) All wires must be labeled and clear of any grounds, shorts or opens, and must maintain polarity throughout. Meter out all circuits before calling for final connection assistance. If applicable verify End of Line resistors are in place.**
- 4.) If using shielded cable, the drain wires must be connected and fully insulated, so that neither the shield or the drain wire touches the backbox.**
- 5.) Unless special arrangements are made, we will make one final job site visit. If a special visit is required for an elevator inspection or partial occupancy, then additional charges may if prior arrangements were not made. Call your customer service representative if needed.**
- 6.) If you have any defective or left over parts, DO NOT WRITE ON THEM OR THE BOXES. Save the original box, all mounting hardware and instructions. Returns that do not conform to this practice will not be accepted for credit.**
- 7.) If the system is being monitored through a digital communicator, please see information on the next page.**

**IMPORTANT INFORMATION FOR THE BUILDING OWNERS  
SPECIAL NOTE REGARDING ALARM MONITORING SERVICES**

**Included with your alarm system package is a digital communicator, which sends coded messages to a private 24 hour central station if your alarm system is activated. This is a code requirement for most fire alarm systems. As a service to our customer, we offer central station monitoring services from our local UL Listed central station at extremely competitive rates.**

**If the central station monitoring contract is purchased through Norris Inc. prior to our scheduled start up; we will connect, program, and test the communicator at no additional charge.**

**Should the building owners decide to obtain monitoring services from another company, then the cost for programming and testing the communicator will be the sole responsibility of the firm they have contracted with. Furthermore, if programming changes are made to the system by persons other than Norris Inc. technicians, then the company performing the changes shall be solely liable for any personal injury or loss of life or damage to, or loss of property arising out of the use of or inability to use the system and it shall result in a waiver of any system warranties.**

**We appreciate that you understand the delicate nature of this life safety and/or security system and realize that serious problems may arise when modifications to the system are made, including very simple programming changes.**

**Call Norris Inc. at 1-800-370-FIRE (3473) to make arrangements for central station monitoring services.**



**Norris Inc.**

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South Portland, ME 04106

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# **SUBMITTAL PACKAGE**

**Project:** United Way 550 Forest Ave

**System:** Fire Alarm

**Submitted by:** Norris Inc.

**2257 West Broadway**

**South Portland, Maine 04106**

**Telephone: 1-800-370-3473**

**Submittal Date:** 3/11/2020



# Norris Inc.

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South Portland, ME 04106

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## **Company Profile**

**“We are extremely proud to represent the highest quality manufacturers integrating life safety, alarm, and communication systems throughout northern New England.”**

**—Bradford Norris, President—**

## **Mission Statement**

**Provide quality engineered systems, exceptional service.**

## **Goal**

**Learn...Continually Improve...Exceed Expectations**

**Founded in 1979, Norris Inc. has grown to become northern New England’s leading integrated system contracting and supply company. Norris Inc. is an innovated proactive organization with extensive experience in integration interdisciplinary building management systems. Our local and national affiliations assure that your project will be done properly regardless of size. Representing leading manufacturers, our comprehensive projects provide outstanding quality, reliability, and performance... Surpassing customer application requirements and exceeding the stringent requirements of Underwriters Laboratories, National Fire Protection Association and other codes.**

**We maintain an exceptional level of quality and provide the highest levels of customer service. Our knowledgeable technical support will insure the great service you deserve.**

**Whether your needs involve industrial, commercial, institutional, or educational applications, you can trust that Norris Inc. has the complete resources it takes to provide the right solution, right away.**



## **LIMITED WARRANTY**

**Norris Inc. warrants that the products of its manufacturers shall be free from defects in materials or workmanship as warranted by the manufacturer which is typically for a one (1) year period from the completed installation date, but not always. The completed installation date will be the date when the end-user was able to begin using or started using the product(s) or the system, whether partially or in its entirety. For projects that have a specification or bid instructions to follow which contains specific warranty requirements, Norris Inc. will always honor the warranty terms exactly as specified in the project's specifications or bid documents, which may be more or less in coverage and duration than the manufacturer's warranty. In performing hundreds of projects per year with thousands of different products it is impossible for Norris Inc. to track the terms and details of specified or individual product warranties. Therefore, Norris Inc. will request that the owner's representative provide these special warranty details when the warranty work is requested; otherwise a standard one (1) year warranty on the equipment will be honored. The manufacturer's warranty is for equipment only and does not include any labor and/or shipping costs. All warranties provided by Norris Inc. are limited with the same limitations included with the manufacturer's warranty which is included in the manuals of the products being provided.**

**The warranty will apply only if such goods have been properly installed, are subject to normal proper use and have not been modified in any manner whatsoever. Upon return of the defective product, Norris Inc. will, at its sole discretion, either repair or replace, at no cost, such goods determined to have a defect in materials or workmanship. In cases of a warranty repair, Norris Inc. will use its sole discretion to determine if a suitable replacement part can be provided on loan while the repairs are being performed.**

**All warranty work is performed during regular business hours. If emergency warranty work is required, the customer will pay the difference between the emergency service bill and our normal hourly charges.**

**Norris Inc.'s limited warranty does not apply to those products that are damaged due to misuse, abuse, negligence, exposure to adverse environmental conditions, acts of God, or have been modified in any manner whatsoever.**

**Norris Inc.'s standard terms and conditions are provided with our invoices. Those Terms and Conditions shall be provided upon request.**

**NORRIS INC. SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM LOSS OF LIFE AND/OR PROPERTY OR OTHER DAMAGE OR LOSSES OWING TO THE FAILURE OF NORRIS INC. PRODUCTS BEYOND THE COST OF REPAIR OR REPLACEMENT OF ANY DEFECTIVE PRODUCTS.**

**NORRIS INC. MAKES NO WARRANTY OF FITNESS OR MERCHANTABILITY AND NO OTHER WARRANTY, ORAL OR WRITTEN, EXPRESS OR IMPLIED AS ALLOWED TO THE FULLEST EXTENT OF THE LAW.**



## **OUR CONTINUOUS COMMITMENT TO OUR ENVIRONMENT**

**At Norris Inc, we are proudly committed to continuous environmental improvement for a sustainable future and to develop strong partnerships within our community.**

**Our mission while running our operations is to do everything within our power to improve the environmental quality of our world and to work together to create a clean and safe place to live in and work in for future generations.**

**We will incorporate and promote green practices within our operations with policies to support it, a system of rewarding those that fully embrace it and then will regularly review our practices for continuous improvement.**

**We will establish policies, make investments in technologies and set the example in our own operations to include our ongoing commitment to go paperless and making it a requirement to Reuse, Reduce, & Recycle, to turn off unneeded lights, to not allow our vehicles to idle, to encourage carpooling and to utilize practical energy efficient transportation.**

**We will always be 100% compliant with all applicable environmental laws and regulations and will report any violations.**

**We will remain committed to working locally and whenever possible to sell and use locally manufactured products.**

**We will insist that every purchase we make will include a review of its environmental impact with a very high priority to selecting the greenest products and services available.**

**We will remain committed to selling low energy products. This includes promoting wireless technologies, using existing wire infrastructure in our installations, promoting solar powered devices, using our Remote Services in lieu of on-site service calls and performing calculations to minimize power supply and battery needs.**

**We will educate our employees and customers to illustrate that green practices and purchases are almost always less costly in the long run.**

**We will support and give priority to organizations that show the strongest commitment to the environment.**

**We will actively encourage and promote the same responsible green practices that we utilize in the work place to our employees for use in their everyday personal lives.**

## **REMOTE INTERNET CONNECTIONS**

**As an added service to our customers and in order to facilitate the commissioning of the system(s) being provided within this submittal and then later to provide warranty support Norris Inc. may (at Norris Inc's option) use internet connections to gain access to the system(s) being provided. Many methods can be used, but the most popular is utilizing software named LogMeIn. This software or any other method used to connect to the customer's network will allow Norris Inc's technicians the ability to get onto the programming and diagnostic levels of the system(s) being provided via the building owner's or tenant's data network and program, diagnose or make needed changes to the operation of the system(s). This will provide a better working atmosphere to perform programming from a controlled environment without the disruptions of a construction job-site and allow fast and efficient trouble shooting and/or servicing if problems should occur later. Acceptance of this submittal by those approving it shall constitute an acceptance and approval to perform the work necessary to install and/or enable these network connections if Norris Inc. chooses to do so. It is the sole responsibility of the submittal approvers to advise the building owners and/or tenants that Norris Inc. has the ability to gain access to their network. At the specific request of those approving this submittal or the contractor that Norris Inc. is working for the building owners or tenants that own the network, Norris Inc. can remove or disable the ability to connect to the building's network. However, leaving it in place will allow for quicker and more cost effective service when it is needed. Under absolutely no circumstances shall Norris Inc, its principals, employees, or heirs to be held responsible for any losses incurred as a result of this network connection or the inability for the network connection to operate as expected.**



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03/30/2020

*This is to certify that*

**NORRIS, INC.**

*is an authorized Premier Engineered Systems Distributor for*  
**NOTIFIER**

*During the year of 2020*

Richard Bauer  
Vice President Sales

*ESD Since 1987*

United Way 550 Forest AveReviewed for Code Compliance  
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Department  
Approved 03/30/2020**Date:**

3/11/2020

**Project #:**

1703

**Equipment List**

<u>Manufacturer</u>	<u>Part Number</u>	<u>Description</u>
NOTIFIER	FSP951IV	ADDRESSABLE SMOKE DETECTOR
NOTIFIER	B3006IV	DETECTOR BASE
WHEELOCK	HSR	HORN STROBE, WALL, RED
WHEELOCK	STR	STROBE, WALL, RED
WHEELOCK	RSSWP2475WFR	STROBE, WEATHER PROOF, WALL, RED
WHEELOCK	WPSBBR	WEATHER PROOF BACK BOX
WINDY CITY	761360	16-02 UNS SOL FPLP RED JKT PLM
WINDY CITY	767960	14-02 UNS SOL FPLP RED JKT

# FSP-951 Series

## Intelligent Plug-In Photoelectric Smoke Detectors



Intelligent/Addressable Devices

### General

The NOTIFIER FSP-951 Series intelligent plug-in smoke detectors are designed for both performance and aesthetics. A new modern, sleek, contemporary design and enhanced optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards. The FSP-951 Series detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. Point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for selective maintenance when chamber contamination reaches an unacceptable level. Dual electronic thermistors add 135°F (57°C) fixed temperature thermal sensing on the FSP-951T. The FSP-951R is a remote test capable detector for use with DNR Series duct detector housings. FSP-951 series detectors are available for both FlashScan® and CLIP applications as designated.

### Features

- New modern profile for improved aesthetics.
- Designed to meet UL268 7th Edition.
- Stable communication technique with noise immunity.
- Low standby current.
- Two-wire SLC connection.
- Compatible with FlashScan® and CLIP protocol systems.
- Rotary, decimal addressing (1-99 on CLIP systems, 1-159 on FlashScan systems).
- Optional remote, single-gang LED accessory.
- Dual LED design provides 360° viewing angle.
- Visible bi-color LEDs blink green every time the detector is addressed, and illuminate steady red on alarm (*FlashScan systems only*).
- Remote test feature from the panel.
- Walk test with address display (an address on 121 will blink the detector LED: 12-[pause]-1 (*FlashScan systems only*)).
- Built-in functional test switch activated by external magnet.
- Built-in tamper-resistant feature.
- Sealed against back pressure.
- Expanded color options.
- SEMS screws for wiring of the separate base.
- Optional relay, isolator, and sounder bases.

### Specifications

#### Sensitivity:

- UL Applications: 0.5% to 4.0% per foot obscuration.
- ULC Applications: 0.5% to 3.5% per foot obscuration.

**Size:** 2.0" (5.3 cm) high; base determines diameter.

- B300-6: 6.1" (15.6 cm) diameter.
- B501: 4" (10.2 cm) diameter.

For a complete list of detector bases see DN-60981.

**Shipping weight:** 3.4oz (96.4g)

#### Operating Temperature range:

- FSP-951, 0°C to 50°C (32°F to 122°F).
- FSP-951T, 0°C to 38°C (32°F to 100°F).



FSP-951 in B300-6 Base

- FSP-951R installed in a DNR/DNRW, -20°C to 70°C (-4°F to 158°F).

**UL/ULC Listed Velocity Range:** 0-4000 ft/min. (1219.2 m/min.), suitable for installation in ducts.

**Relative Humidity:** 10%-93% noncondensing.

**Thermal Ratings:** Fixed-temperature setpoint 135°F (57°C).

#### DETECTOR SPACING AND APPLICATIONS

NOTIFIER recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceiling, space detectors 30 feet (9.1m). For specific information regarding detector spacing, placement, and special applications refer to NFPA 72. *System Smoke Detector Application Guide*, document A05-1003, is available at [systemsensor.com](http://systemsensor.com)

#### ELECTRICAL SPECIFICATIONS

**Voltage Range:** 15-32 volts DC peak.

**Standby Current (max. avg.):** 200µA @ 24VDC (one communication every five seconds with LED enabled).

**LED Current (max.):** 4.5mA @ 24 VDC ("ON").

### Installation

FSP-951 series plug-in detectors use a separate base to simplify installation, service, and maintenance.

Mount base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep. For a chart of compatible junction boxes, see DN-60981.

**NOTE:** 1) Because of inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring. 2) When using relay or sounder bases, consult the ISO-X(A) installation sheet I56-1380 for device limitations between isolator modules and isolator bases.



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## Agency Listings and Approvals

These listings and approvals apply to the detectors specified in this document. In some cases, certain detectors or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL/ULC Listed: S911
- FM Approved
- CSFM: 7272-0028:0503

## Product Line Information

### NOTE:

- Detectors must be mounted to one of the Intelligent Bases listed below.
- "A" suffix indicates ULC Listed model.
- "IV" suffix indicates FlashScan® and CLIP device.

**FSP-951:** White, low-profile intelligent photoelectric sensor, FlashScan only.

**FSP-951A:** Same as FSP-951 but with ULC listing.

**FSP-951-IV:** Ivory, low-profile intelligent photoelectric sensor.

**FSP-951A-IV:** Same as FSP-951-IV but with ULC listing.

**FSP-951T:** White, same as FSP-951 but includes a built-in 135°F (57°C) fixed-temperature thermal device. FlashScan only.

**FSP-951TA:** Same as FSP-951T but with ULC listing.

**FSP-951T-IV:** Ivory, same as FSP-951T but includes a built-in 135°F (57°C) fixed-temperature thermal device.

**FSP-951TA-IV:** Same as FSP-951T-IV but with ULC listing.

**FSP-951R:** White, low-profile intelligent photoelectric sensor, remote test capable. For use with DNR/DNRW. FlashScan only.

**FSP-951RA:** Same as FSP-951R but with ULC listing. For use with DNRA.

**FSP-951R-IV:** Ivory, low-profile intelligent photoelectric sensor, remote test capable. For use with DNR/DNRW.

**FSP-951RA-IV:** Same as FSP-951R-IV but with ULC listing. For use with DNRA.

### INTELLIGENT BASES

**NOTE:** For details on intelligent bases, see DN-60981

**B300-6:** White, 6" base, standard flanged low-profile mounting base.

**B300-6-IV:** Ivory, 6" base, standard flanged low-profile mounting base.

**B300A-6:** Same as B300-6, ULC listed.

**B300A-6-IV:** Ivory, 6" standard flanged low-profile mounting base, ULC listed.

**B300-6-BP:** Bulk pack of B300-6, package contains 10

**B501-WHITE:** White, 4" standard European flangeless mounting base. UL/ULC listed.

**B501-BL:** Black, 4" standard European flangeless mounting base. UL/ULC listed.

**B501-IV:** Ivory color, 4" standard European flangeless mounting base. UL/ULC listed.

**B501-WHITE-BP:** Bulk pack of B501-WHITE contains 10.

**B224RB-WH:** White, relay base.

**B224RB-IV:** Ivory, relay base.

**B224RBA-WH:** White, relay base, ULC listing.

**B224RBA-IV:** Ivory, relay base, ULC listing.

**B224BI-WH:** White, *isolator* detector base.

**B224BI-IV:** Ivory *isolator* detector base.

**B224BIA-WH:** White, *isolator* detector base, ULC listing.

**B224BIA-IV:** Ivory *isolator* detector base, ULC listing.

**B200S-WH:** White, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone. Uses FlashScan protocol.

**B200S-IV:** Ivory, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone. Uses FlashScan protocol.

**B200SA-WH:** Same as B200S-WH, ULC listing.

**B200SA-IV:** Same as B200S-IV, ULC listing.

**B200SCOA-WH:** White, Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with SO Series detector applications).

**B200SCOA-IV:** Ivory Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with SO Series detector applications, ULC listing).

**B200S-LF-WH:** White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement.

**B200S-LF-IV:** Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement.

**B200SR-WH:** White, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications.

**B200SR-IV:** Ivory, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications.

**B200SRA-WH:** Same as B200SR-WH with, ULC listing.

**B200SRA-IV:** Same as B200SR-IV in Ivory color, ULC listing.

**B200SR-LF-WH:** White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications.

**B200SR-LF-IV:** Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications.

### MOUNTING KITS AND ACCESSORIES

**TR300:** White, replacement flange for B210LP(A) base.

**TR300-IV:** Ivory, replacement flange for B210LP(A) base.

**RA100Z(A):** Remote LED annunciator. 3 – 32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501(A) and B300(A)-6.

**M02-04-00:** Test magnet.

**M02-09-00:** Test magnet with telescoping handle.



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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 Notifier. Phone: (800) 627-3473, FAX: (203) 484-7118.  
[www.notifier.com](http://www.notifier.com)

# Exceder Strobe, Horn Strobe, and Horn Notification Appliances



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## Description

The Wheelock Exceder Series of notification appliances feature a sleek modern design that will please building owners with reduced total cost of ownership. Installers will benefit from its comprehensive feature list, including the most candela options in one appliance, low current draw, no tools needed for setting changes, voltage test points, 12/24 VDC operation, universal mounting base and multiple mounting options for both new and retrofit construction.

The Wheelock Exceder Series incorporates high reliability and high efficiency optics to minimize current draw allowing for a greater number of appliances on the notification appliance circuit. All strobe models feature an industry first of 8 candela settings on a single appliance. Models with an audible feature 3 sound settings (90, 95, 99 dB). All switches to change settings, can be set without the use of a tool and are located behind the appliance to prevent tampering. Wall models feature voltage test points to take readings with a voltage meter for troubleshooting and AHJ inspection.

The Wheelock Exceder Series of wall and ceiling notification appliances feature a Universal Mounting Base (UMB) designed to simplify the installation and testing of horns, strobes, and combination horn strobes. The separate universal mounting base can be pre-wired to allow full testing of circuit wiring before the appliance is installed and the surface is finished. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues. The Contact Cover is polarized to prevent it from being installed incorrectly and prevents the appliance from being installed while it is on the UMB. When the Contact Cover is removed the circuit will show an open until the appliance is installed. The UMB allows for consistent installation and easy replacement of appliances if required. Wall models provide an optional locking screw for extra secure installation, while the ceiling models provide a captivated screw to prevent the screw from falling during installation.



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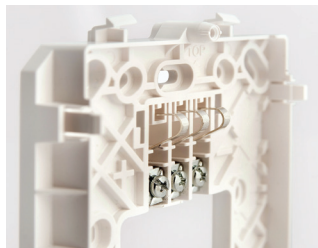
## Features

- Sleek modern aesthetics
- Finger slide switches
- Voltage test points
- Multiple voltages
- 3 Audible settings
  - 90, 95, 99 dB
- Industry leading—8 candela settings on 1 device
  - Wall: 15/1575/30/75/95/110/135/185
  - Ceiling: 15/30/60/75/95/115/150/177

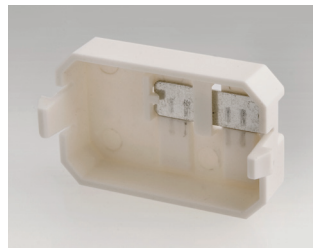


- Universal mounting base
  - Ceiling and wall
  - Mounts to 5 backbox types: 1 gang, 2 gang, 4" square, 3.5" octal. & 4" octal. (100mm for international customers)

### Universal mounting base

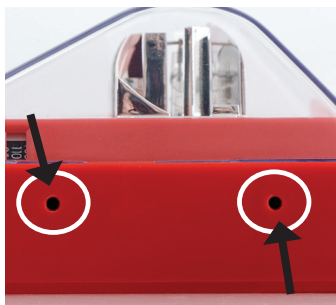


### Contact cover



Common base for wall and ceiling with 5 mounting options

- Voltage test points for quick troubleshooting and easy spot checking (wall models only)



- Environmentally friendly
  - Low current draw
- Up to 9 models now in 1 appliance draw<sup>①</sup>
- 12/24VDC on a single appliance
- Easy to remember model numbers

<sup>①</sup> Patented

**Note:** Please read these specifications and associated installation instructions, before using, specifying, or installing this product. Visit Eaton.com/massnotification for current installation instructions.

## General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%) UL 464 (85% UL 1971).
- Series Exceder horns are under UL Standard 464 for audible signal appliances (Indoor use only).

## Compatibility and requirements

- Synchronize using the Wheelock® Sync Modules or panels with built-in Wheelock® Patented Sync Protocol
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range

## Compliance

- UL 1971, UL 464, ULC, CSFM, FM
- ADA/NFPA/ANSI/OSHA
- RoHS



**Table 1. Strobe Ratings per UL Standard 1971**

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup>													
		24 VDC / 24 FWR												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
ST	8.0-33.0	0.057	0.070	0.085	—	0.135	0.163	0.182	—	0.205	—	—	0.253	0.110	0.140
STC	8.0-33.0	0.061	—	0.085	0.103	0.135	0.163	—	0.182	—	0.205	0.253	—	0.110	—

**Table 2. Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC**

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup> at Anechoic 99 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102	—	0.148	0.176	0.197	—	0.242	—	—	0.282	0.125	0.159
HSC	8.0-33.0	0.082	—	0.102	0.141	0.148	0.176	—	0.197	—	0.242	0.282	—	0.125	—

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup> at Anechoic 95 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087	—	0.139	0.163	0.186	—	0.230	—	—	0.282	0.122	0.153
HSC	8.0-33.0	0.073	—	0.087	0.128	0.139	0.163	—	0.186	—	0.230	0.272	—	0.122	—

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup> at Anechoic 90 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084	—	0.136	0.157	0.184	—	0.226	—	—	0.267	0.120	0.148
HSC	8.0-33.0	0.065	—	0.084	0.120	0.136	0.157	—	0.184	—	0.226	0.267	—	0.120	—

① UL max current rating is the maximum RMS current within the listed voltage range (16-33 VDC for 24 VDC units). For strobes the UL max current is usually at the minimum listed voltage (16 VDC for 24 VDC units). For audibles the max current is usually at the maximum listed voltage (33 VDC for 24 VDC units). For unfiltered ratings, see installation instructions.

**Table 3. Horn Ratings per UL Anechoic**

Model	Regulated Voltage Range VDC	99 dB	95 dB	90 dB
HN	16-33.0	0.064	0.044	0.022
HNC	16-33.0	0.084	0.044	0.022
HN	8.0-17.5	0.047	0.026	0.017
HNC	8.0-17.5	0.047	0.026	0.017

**Table 4. Specification & Ordering Information**

Model	Strobe Candela	Sync w/ Wheelock Power Supplies	DSM or	12/24 VDC <sup>①</sup>	Mounting Options
<b>Horn Strobes</b>					
HSR	15/1575/30/75/95/110/135/185	X		X	UMB <sup>②</sup>
HSW	15/1575/30/75/95/110/135/185	X		X	UMB <sup>②</sup>
HSRC	15/30/60/75/95/115/150/177	X		X	UMB <sup>②</sup>
HSWC	15/30/60/75/95/115/150/177	X		X	UMB <sup>②</sup>
<b>Strobes</b>					
STR	15/1575/30/75/95/110/135/185	X		X	UMB <sup>②</sup>
STW	15/1575/30/75/95/110/135/185	X		X	UMB <sup>②</sup>
STRC	15/30/60/75/95/115/150/177	X		X	UMB <sup>②</sup>
STWC	15/30/60/75/95/115/150/177	X		X	UMB <sup>②</sup>
<b>Horn</b>					
HNR		X		X	UMB <sup>②</sup>
HNW		X		X	UMB <sup>②</sup>
HNRC		X		X	UMB <sup>②</sup>
HNWC		X		X	UMB <sup>②</sup>

① 12 VDC models feature 15 & 15/75 settings

② UMB = Universal Mounting Base

**Model Legend**

HN	= Horn	R	= Red
ST	= Strobe	A	= Agent Lettering (strobes only)
HS	= Horn Strobe	AL	= Alert Lettering (strobes only)
C	= Ceiling Mount	N	= No Lettering (strobes only)
W	= White		

Example 1: STRC = Strobe, Red, Ceiling Mount  
 Example 2: HSR = Horn Strobe, Red, Wall Mount  
 Example 3: HSW = Horn Strobe, White, Wall Mount  
 Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering



Example: HSR



Example: HSWC



## Architects and Engineers Specifications

The notification appliances shall be Wheelock Exceder Series HS Audible Strobe appliances, Series ST Visual Strobe appliances and Series HN Audible appliances or approved equals. The Series HS and ST Strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series HS and HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All Series shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 8 to 33 VDC. Indoor wall models shall incorporate voltage test points for easy voltage inspection.

The Series HS Audible Strobe and ST Strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series shall be of low current design. Where multi-candela appliances are specified, the strobe intensity shall have 8 field selectable settings at 15, 15/75, 30, 75, 95, 110, 135, 185 candela for wall mount and 15, 30, 60, 75, 95, 115, 150, 177 candela for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 15/75 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g., ADA compliance). Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a minimum of three (3) field selectable settings for dBA levels and shall have a choice of continuous or temporal (Code 3) audible outputs.

The Series HS Audible Strobe, ST Strobe and Series HN Audible shall incorporate a patented Universal Mounting Base that shall allow mounting to a single-gang, double-gang, 4-inch square, 3.5-inch octal, 4-inch octal or 100mm European type back boxes. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Continuity checking of the entire NAC circuit prior to attaching any notification appliances shall be allowed. Product shall come with Contact Cover to protect contact springs. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). The mounting base shall be the same base among all horn, strobe, horn strobe, wall and ceiling models. All notification appliances shall be backwards compatible.

The Series HS and ST wall models shall have a low profile measuring 5.24" H x 4.58" W x 2.19" D. Series HN wall shall measure 5.24" H x 4.58" W x 1.6" D. The Series HSC and STC shall be round and have a low profile with a diameter of 6.68" x 2.63" D. Series HNC ceiling shall have a diameter of 6.68" x 1.50" D.

When synchronization is required, the appliance shall be compatible with Wheelock's DSM Sync Modules, Wheelock Power Supplies or other manufacturer's panels with built-in Wheelock Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation when used with Wheelock synchronization protocol.

**Wall Appliances:** UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS

**Ceiling Appliances:** UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS

**Note:** Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Eaton standard terms and conditions.



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## Weatherproof Appliances - Series AH Audibles, AS Audible Strobes, MT Multitone Strobes, RSS Strobes and ET70 Speaker Strobes and Weatherproof Mounting Accessories



Reviewed for Code Compliance  
Permitting and Inspections  
Department  
Approved 03/30/2020

### Description:

Designed for life safety, performance and reliability, Cooper Notification's Wheelock cost effective weatherproof notification appliances include:

Weatherproof Appliances	Series
Strobes	RSSWP
Horn Strobes	ASWP
Horns	AH-24WP, AH-12WP
Multitone Horn Strobes	MTWP
Multitone Horns	MT
Speaker Strobes	ET70WP
Speakers	ET-1010

All strobe models are UL dual listed - meeting both UL1638 and UL1971 requirements. As dual listed appliances, these weatherproof strobes, horn strobes and speaker strobes are listed for outdoor applications under UL 1638 as well as under UL 1971, the Standard for Safety Signaling Devices for Hearing Impaired. With an extended temperature range of -31°F to 150°F (-35°C to 66°C), Wheelock weatherproof appliances meet or exceed UL outdoor test requirements for rain, humidity and corrosion resistance while providing multiple strobe intensity options, including the highest strobe ratings available for area coverage per NFPA 72 strobe spacing tables (up to 185 candela for wall mounting and 177 candela for ceiling mounting).

To enable weatherproof mounting, Cooper Notification provides the industry's widest choice of mounting options for surface or unique semi-flush installation. Models are available for surface mounting to Wheelock weatherproof backboxes on walls or ceilings. The optional WP-KIT allows the weatherproof backboxes (IOB, WPBB or WPSBB) to be mounted to a recessed electrical box for concealed conduit installation. For semi-flush installation, the WPA\* and WFPA\* kits allow a customer to mount the weatherproof appliances to a recessed electrical box without the need for an external weatherproof backbox. See the Backboxes, Plates and Gaskets Table on page three of this document for a summarization of these mounting options and the required accessories.

All models may be synchronized using the Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. The horn output of horn strobes can be independently controlled on 2-wire circuits using the Wheelock patented sync protocol. MTWP horn strobe models are 4-wire appliances; the strobes can be synchronized while the audible can be connected to a coded fire alarm system or can be set to produce any of eight selectable tones.

### Features:

- Approvals include: UL Standards 1971, 1638, 464 and 1480 California State Fire Marshal (CSFM), New York City (MEA), Factory Mutual (FM), Chicago (BFP) and ULC . See agency approvals by model number on page two of this document
- Compliance with the following requirements: NFPA, UFC, ANSI 117.1, OSHA Part 29, 1910.165, ADA
- Weatherproof with extended temperature range of -40°F to 150°F (-40°C to 66°C)\*
- Dual Listed strobe models (UL 1638 and UL 1971)
- Industry's highest strobe candela options
- Synchronize using the Wheelock Sync Modules or panels with built-in Wheelock Patented Sync Protocol
- Models with field selectable tone, dBA and candela settings
- Wall or ceiling mounting options
- Surface or semi-flush mounting
- IN/OUT wiring termination accepting two #12-18 AWG wires at each terminal

The series RSSWP, ASWP, AH-24WP, MTWP-2475W, and MT-12/24 have UL / ULC approval down to -40°F. The ET-1010 and ET70WP have UL approval down to -40°F. The AH-12WP has UL approval down to -31°F.



E5946  
S5391  
S2652




151-92-E



7125-0785:131 (ASWP)  
7125-0785:146 (ET70WP)  
7125-0785:156 (MTWP)  
7300-0785:154 (RSSWP)



**NOTE: All CAUTIONS and WARNINGS are identified by the symbol . All warnings are printed in bold capital letters.**

**WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER WHEELLOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**



Reviewed for Code Compliance  
Permitting and Inspections  
Department  
April 03/30/2020

**General Notes:**

- Strobes are designed to flash at 1 flash per second minimum over their UL Listed Regulated Voltage Range.
- All candela ratings represent minimum effective Strobe intensity based on UL Standards 1971 and 1638 as indicated in candela ratings table.

**Wall Mount**



Strobe	Color	Order Code
<b>RSSWP-2475W-FR</b>	Red	9013
RSSWP-2475W-FW	White	3034
RSSWP-24MCWH-FR	Red	5161
RSSWP-24MCWH-FW	White	5165

Audible Strobe	Color	Order Code
ASWP-2475W-FR	Red	9012
ASWP-24MCWH-FR	Red	5137
ASWP-24MCWH-FW	White	5140

Multi-tone Strobe	Color	Order Code
MTWP-2475W-FR	Red	8420
MTWP-2475W-FW	White	3112
MTWP-24MCWH-FR	Red	5132
MTWP-24MCWH-FW	White	5134

Speaker Strobe	Color	Order Code
ET70WP-2475W-FR	Red	9077
ET70WP-2475W-FW	White	3179
ET70WP-24185W-FR	Red	4885
ET70WP-24185W-FW	White	4891
ET70WP-24135W-FR	Red	4872
ET70WP-24135W-FW	White	4875

**Ceiling Mount**



Strobe	Color	Order Code
RSSWP-2475C-FR	Red	4338
RSSWP-2475C-FW	White	4446
RSSWP-24MCCH-FR	Red	5167
RSSWP-24MCCH-FW	White	5187

Audible Strobe	Color	Order Code
ASWP-2475C-FR	Red	4251
ASWP-2475C-FW	White	4502
ASWP-24MCCH-FR	Red	5149
ASWP-24MCCH-FW	White	5157

Multi-tone Strobe	Color	Order Code
MTWP-2475C-FR	Red	4457
MTWP-2475C-FW	White	4478
MTWP-24MCCH-FR	Red	5102
MTWP-24MCCH-FW	White	5122

Speaker Strobe	Color	Order Code
ET70WP-2475C-FR	Red	4452
ET70WP-2475C-FW	White	4454
ET70WP-24177C-FR	Red	4845
ET70WP-24177C-FW	White	4859
ET70WP-24115C-FR	Red	4550
ET70WP-24115C-FW	White	4732

**Wall or Ceiling Mount**



Audible	Color	Order Code
AH-24WP-R	Red	7416
AH-12WP-R	Red	7415

Horn	Color	Order Code
MT-12/24-R	Red	5023

Speaker	Color	Order Code
ET-1010-R	Red	3135
ET-1010-W	White	3137

UL Max. Current	AH	
	24 VDC	12 VDC
High (99) dBA	0.080	0.192
Med (95) dBA	0.043	0.108
Low (90) dBA	0.021	0.058

UL Reverberant dBA @ 10 Feet							
Watts	1/8	1/4	1/2	1	2	4	8
ET-1010	77	80	83	86	87	92	94
ET70WP	78	81	84	87	90	93	95

Series	Candela Ratings				ASWP		
	UL 1971	UL 1638 @ 77°F	UL 1638 @ -40°F	RSS, ET70WP and MTWP UL Max Current (Strobe Only)	High	Med	Low
	2475W	30**	180	115	0.138	0.168	0.155
2475C	15	180	115	0.138	0.168	0.155	0.150
MCWH	135	135	56	0.300	0.355	0.340	0.335
	185	185	77	0.420	0.480	0.465	0.460
MCCH	115	115	47	0.300	0.355	0.340	0.335
	177	177	73	0.420	0.480	0.465	0.460
24185	185	185	77	0.420	**Wall mount rating only		
24177	177	177	73	0.420			

UL Max. Current (Audible)	MTWP/MT 24 VDC		MT 12 VDC	
dBA	HI	STD	HI	STD
Horn	0.108	0.044	0.177	0.034
Bell	0.053	0.024	0.095	0.020
March Time	0.104	0.038	0.142	0.034
Code 3 Horn	0.091	0.035	0.142	0.034
Code 3 Tone	0.075	0.035	0.105	0.021
Slow Whoop	0.098	0.037	0.142	0.035
Siren	0.104	0.036	0.152	0.030
Hi/Lo	0.057	0.025	0.114	0.026

Model Number	Agency Approvals				
	UL	MEA	CSFM	FM	BFP
<b>Strobe</b>					
RSSWP-2475	X	X	X	X	-
RSSWP-24MCWH	X	-	X	-	-
RSSWP-24MCCH	X	-	X	-	-
<b>Audible Strobe</b>					
ASWP-2475	X	X	X	X	X
ASWP-MCWH	X	-	X	-	-
ASWP-MCCH	X	-	X	-	-
<b>Multitone Strobe</b>					
MTWP-2475	X	X	X	X	-
MTWP-MCWH	X	-	X	-	-
MTWP-MCCH	X	-	X	-	-
<b>Horns/Audibles</b>					
AH-24WP	X	X	X	X	X
AH-12WP	X	X	X	X	X
MT-12/24	X	X	X	X	X
<b>Speaker Strobe</b>					
ET70WP-2475	X	-	X	X	-
ET70WP-185	X	-	X	X	-
ET70WP-177	X	-	X	X	-
ET70WP-115	X	-	X	X	-
ET70WP-135	X	-	X	X	-



## Mounting Accessories



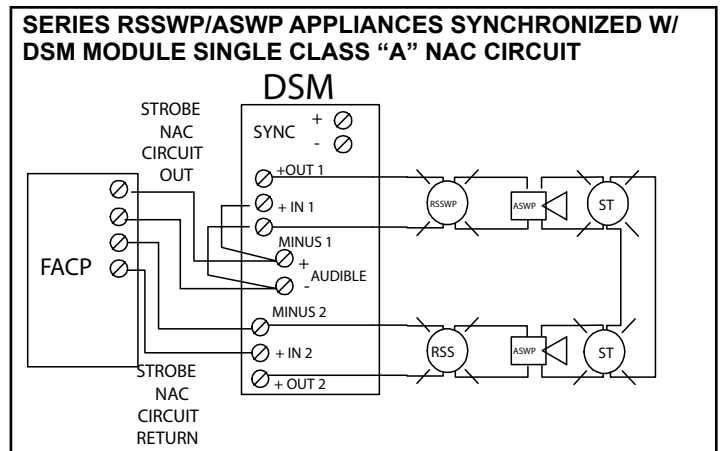
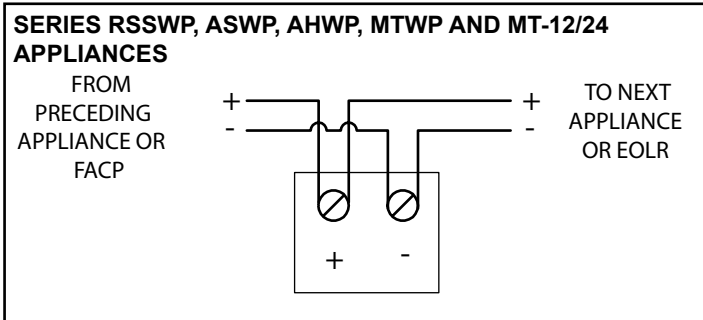
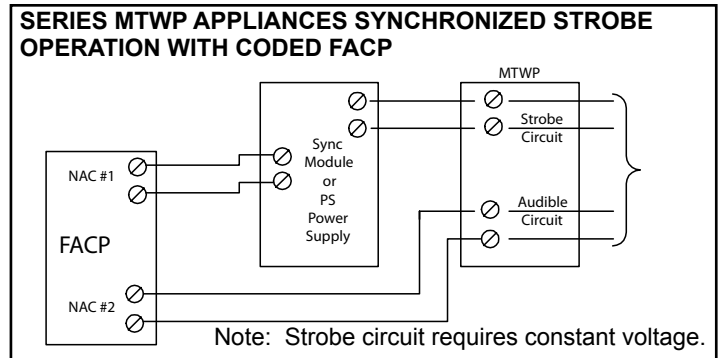
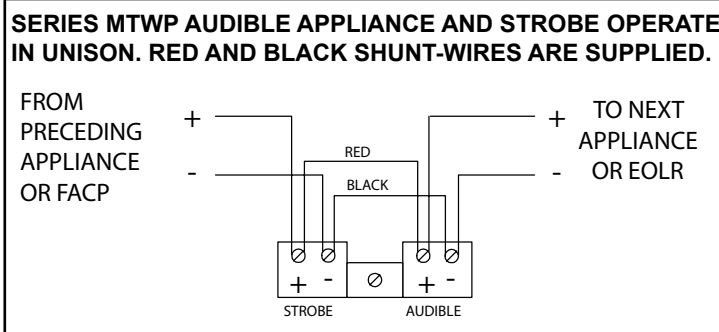
<b>Gasket Kit</b>		Order Code
WP-KIT		4486
<b>Flush Plates</b>		
WFPA-R	Red	4698
WFPA-W	White	4701
WFP-R	Red	4696
WFP-W	White	4697
<b>Backboxes</b>		
IOB-R*	Red	5046
IOB-W*	White	5047
<b>WPSBB-R*</b>	Red	9751
WPSBB-W*	White	3033
WPBB-R*	Red	9014
WPBB-W*	White	4692
WBB-R	Red	2959
WBB-W	White	2960

Mounting Options:

	Backboxes, Plates, Gasket Kits		
	Surface Mount		Flush Mount
	Exposed Conduit	Concealed Conduit	
RSSWP Strobes	WPSBB	WPSBB + WP-KIT	WFP
ET70WP Speaker Strobes	IOB	IOB + WP-KIT	WFP
ASWP Horn Strobes	WPBB	WPBB + WP-KIT	WFPA
AHWP Horns	WBB	-	WFP
ET-1010 Speakers	WBB	-	WFP
MTWP Multitone Horn Strobes	IOB	IOB + WP-KIT	WFP
Multitone Horn	IOB	IOB + WP-KIT	WFP

\*IOB, WPSBB and WPBB models include weep holes and plug in the event that moisture may have entered the appliance

## Wiring Diagrams



Note: Models are available in Red or White. Contact Customer Service for Order Code and Delivery.  
#Refer to Data Sheet S7000 for Mounting Options

**NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc. dba Cooper Notification standard terms and conditions.**

## ARCHITECTS AND ENGINEERS SPECIFICATIONS

### General

Weatherproof notification appliances shall be UL listed for outdoor use. Weatherproof Strobe appliances shall be listed under UL Standard 1638 (Standard for Visual Signaling Appliances) for Indoor/Outdoor use and UL Standard 1971 (Standard for Safety Signaling Devices for Hearing Impaired). The appliances shall be available for optional wall mounting or ceiling mounting to weatherproof backboxes using either exposed conduit or concealed conduit, or semi-flush mounting to a recessed electrical box in walls or ceilings using Wheelock mounting accessories.

### Weatherproof Strobes

Weatherproof Strobe appliances shall produce a minimum flash rate of 60 flashes per minute over the UL Regulated Voltage Range of 16 to 33 VDC and shall incorporate a Xenon flashtube. The weatherproof strobes shall be available with UL 1971 candela ratings up to 185 cd for wall mounting and 177 cd for ceiling mounting. UL 1638 candela ratings up to 180 cd at 77°F shall be available. The strobes shall operate over an extended temperature range of -40°F to 150°F (-40°C to 66°C) and be listed for maximum humidity of 95% RH. Strobe inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

Weatherproof Audibles and Audible/Strobe Combinations Weatherproof horns and multitone audibles shall be listed for Indoor/Outdoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have at least 3 sound level settings. Horn/Strobe combinations shall be able to be synchronized on a single NAC.

Multitone audibles shall be able to produce 8 distinct tones selectable by dip switch and shall have at least 2 sound level settings. Multitone Audible/Strobe combinations shall have independent inputs for the audible and strobe. The strobes shall be able to be synchronized. The audibles shall be able to be coded when operated on a separate NAC.

### Weatherproof Speakers and Speaker/Strobes

Weatherproof speakers and speaker/strobes shall be listed for Indoor/Outdoor use under UL Standard 1480. All speakers shall provide field selectable taps for 1/8W to 8W operation for either 25 VRMS or 70 VRMS audio systems and shall incorporate a sealed back construction for extra protection and improved audibility. Speakers without strobes shall be Wheelock Series ET-1010. They shall be listed to produce up to 94 dBA and shall incorporate a vandal resistant grille design. Speaker with strobes shall be Wheelock Series ET70WP. They shall be available for surface or semi-flush mounting to walls or ceilings and shall be listed to produce up to 93 dBA.

### Synchronization Modules

When synchronization of strobes or temporal code-3 audibles is required, the appliances shall be compatible with the Wheelock Series DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock Patented Sync Protocol. The strobes and audibles shall not drift out of synchronization at any time during operation.

Series ASWP audibles and strobes shall be able to be synchronized on a 2-wire circuit with the ability to silence the audible if required. The strobes on Series MT multitone audible/strobe appliances shall be able to be synchronized and shall be able to be operated on a separate circuit from the audibles while the audible circuit is connected to a coded or continuous NAC.

### Weatherproof Mounting Accessories

Weatherproof mounting options shall include surface mounting or semi-flush mounting to walls or ceilings. Surface mounted appliances shall mount to Wheelock IOB, WBB, WPBB or WPSBB weatherproof backboxes using either exposed conduit or concealed conduit. For concealed conduit the weatherproof backbox shall be mounted to a recessed electrical box with Wheelock's WP-KIT to provide a weatherproof seal for the electrical box. Semi-flush mounted appliances shall mount to a recessed electrical box using Wheelock WFP or WFP-A flush plates to provide a weatherproof seal between the electrical box and the appliance.



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S9004 WP 11/12

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www.coopernotification.com



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Department  
Approved: 03/30/2020

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**COOPER**Notification

# PART NUMBER **761360**

UL Listed and Rated Type FPLP Multi-Conductor Non-Shielded Plenum Fire Alarm

■ 0275/0725 FT ● FIRE/LIFE SAFETY CONTROL CABLE INIT/IND DEVICE/ZONE ABCDE0123456789



## CABLE SPECIFICATIONS

<b>DESCRIPTION</b>	16 AWG 2 Conductor Bare Copper, Twisted, Non-Shielded Plenum Fire Alarm, FPLP (UL)
<b>CONDUCTOR</b>	16 (Solid Bare Copper)
<b>INSULATION</b>	Low-Smoke PVC .010"
<b>COLOR CODE</b>	Black/Red
<b>LAY LENGTH</b>	3.5" LHL (approx. 3.4 TPF)
<b>SHIELD</b>	N/A
<b>DRAIN WIRE</b>	N/A
<b>JACKET</b>	Low-Smoke PVC .018"
<b>JACKET COLOR</b>	Red Jacket
<b>MARKING</b>	FIRE/LIFE SAFETY CONTROL CABLE INIT. / IND. DEVICE / ZONE A B C D E 0 1 2 3 4 5 6 7 8 9 16 AWG FPLP (UL) ROHS MADE IN THE USA
<b>OVERALL DIAMETER</b>	.178" Nom
<b>CABLE WEIGHT</b>	26 Lbs/Mft.
<b>CAPACITANCE</b>	26 pF/Ft. Nom.
<b>IMPEDANCE</b>	72 Ohms
<b>DC RESISTANCE</b>	4.10 Ohms/Mft @ 20 deg. C
<b>TEMPERATURE RATING</b>	0 C to 75 C / 300 Volt

## INDUSTRY STANDARDS

<b>FLAME RATING</b>	Approved For Plenum Use Without Conduit Per NFPA 262 Flame Test
<b>AGENCY APPROVALS</b>	NEC Article 760; FPLP (UL), RoHS Compliant, Made in the USA



Reviewed for Code Compliance  
Permitting and Inspections  
Department  
Approved 03/30/2020

All specifications referenced are nominal measurements unless otherwise noted.



# PART NUMBER **767960**

UL Listed and Rated Type FPLP Multi-Conductor Non-Shielded Plenum Fire Alarm

■ 0275/0725 FT ● FIRE/LIFE SAFETY CONTROL CABLE INIT/IND DEVICE/ZONE ABCDE0123456789



## CABLE SPECIFICATIONS

<b>DESCRIPTION</b>	14 AWG 2 Conductor Bare Copper, Twisted, Non-Shielded Plenum Fire Alarm, FPLP (UL)
<b>CONDUCTOR</b>	14 (Solid Bare Copper)
<b>INSULATION</b>	Low-Smoke PVC .010"
<b>COLOR CODE</b>	Black/Red
<b>LAY LENGTH</b>	3.75" LHL (3.2 TPF)
<b>SHIELD</b>	N/A
<b>DRAIN WIRE</b>	N/A
<b>JACKET</b>	Low-Smoke PVC .018"
<b>JACKET COLOR</b>	Red Jacket
<b>MARKING</b>	FIRE/LIFE SAFETY CONTROL CABLE INIT. / IND. DEVICE / ZONE A B C D E 0 1 2 3 4 5 6 7 8 9 14 AWG FPLP (UL) ROHS MADE IN THE USA
<b>OVERALL DIAMETER</b>	.206" Nom
<b>CABLE WEIGHT</b>	36 Lbs/Mft.
<b>CAPACITANCE</b>	26 pF/Ft. Nom.
<b>IMPEDANCE</b>	72 Ohms
<b>DC RESISTANCE</b>	2.57 Ohms/Mft @ 20 deg. C
<b>TEMPERATURE RATING</b>	0 C to 75 C / 300 Volt

## INDUSTRY STANDARDS

<b>FLAME RATING</b>	Approved For Plenum Use Without Conduit Per NFPA 262 Flame Test
<b>AGENCY APPROVALS</b>	NEC Article 760; FPLP (UL), RoHS Compliant, Made in the USA



Reviewed for Code Compliance  
Permitting and Inspections  
Department  
Approved 03/30/2020

All specifications referenced are nominal measurements unless otherwise noted.

# System Power Requirements

## FCPS-24s8 Power Supply

Protected Premises: <u>United Way Renovation</u>	Date: <u>3/11/2020</u>
Address: <u>550 Forest Ave</u>	
City: <u>Portland</u> State: <u>ME</u>	Zip: <u>04103</u>
Prepared By: <u>Norris Inc</u>	Phone: <u>207-883-3473</u>
Address: <u>2257 Broadway</u> Email: _____	
City: <u>South Portland</u> State: <u>ME</u>	Zip: <u>04106</u>

**AC Branch Current Requirements** 3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

**Primary Standby Load** 0.09 Amps

Current load on the primary power supply during non-alarm conditions.

**Primary Alarm Load** 3.39 Amps

Current load on the primary power supply during alarm conditions.

**Secondary Load Requirements** 2.21 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
<b>Secondary Standby Load</b> 0.065 A	x	Required Standby Time	
		24 hours	1.56
<b>Secondary Alarm Load</b> 3.394 A	x	Required Alarm Time (hours)	
		0.084 hours	0.29
Total Secondary Load			1.85
Derating factor			x 1.2
<b>Secondary Load Requirements</b>			<b>2.21</b>

AH

**Battery Selection** 7 Amp Hours

Select batteries from the list below.

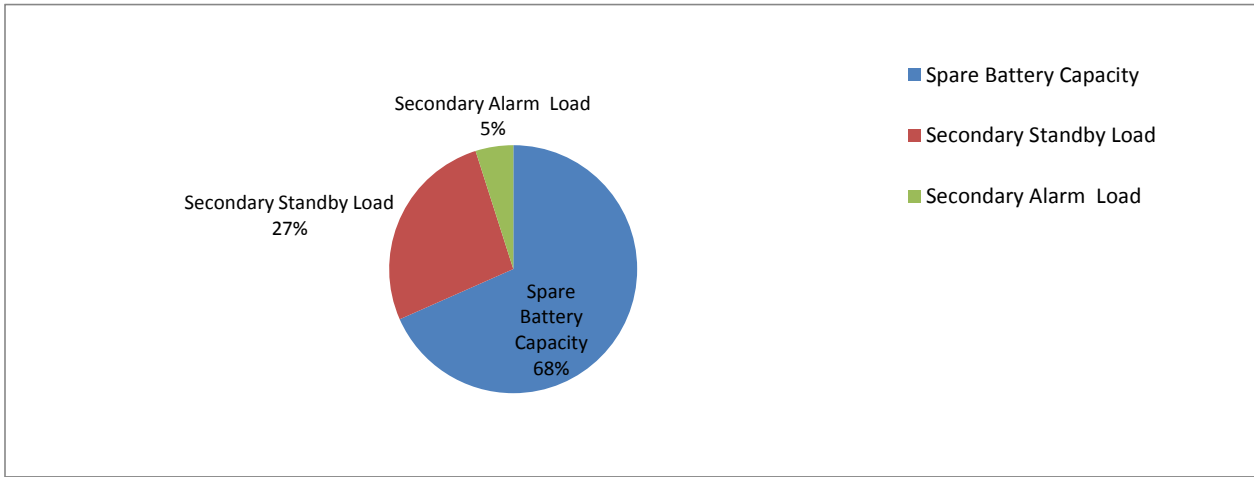
7 AH BAT-1270 Battery (12 volt)

- Two     Four (two 12VDC sets in parallel)



### Battery Distribution Chart

Shows amp-hour distribution of your selections.



### Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

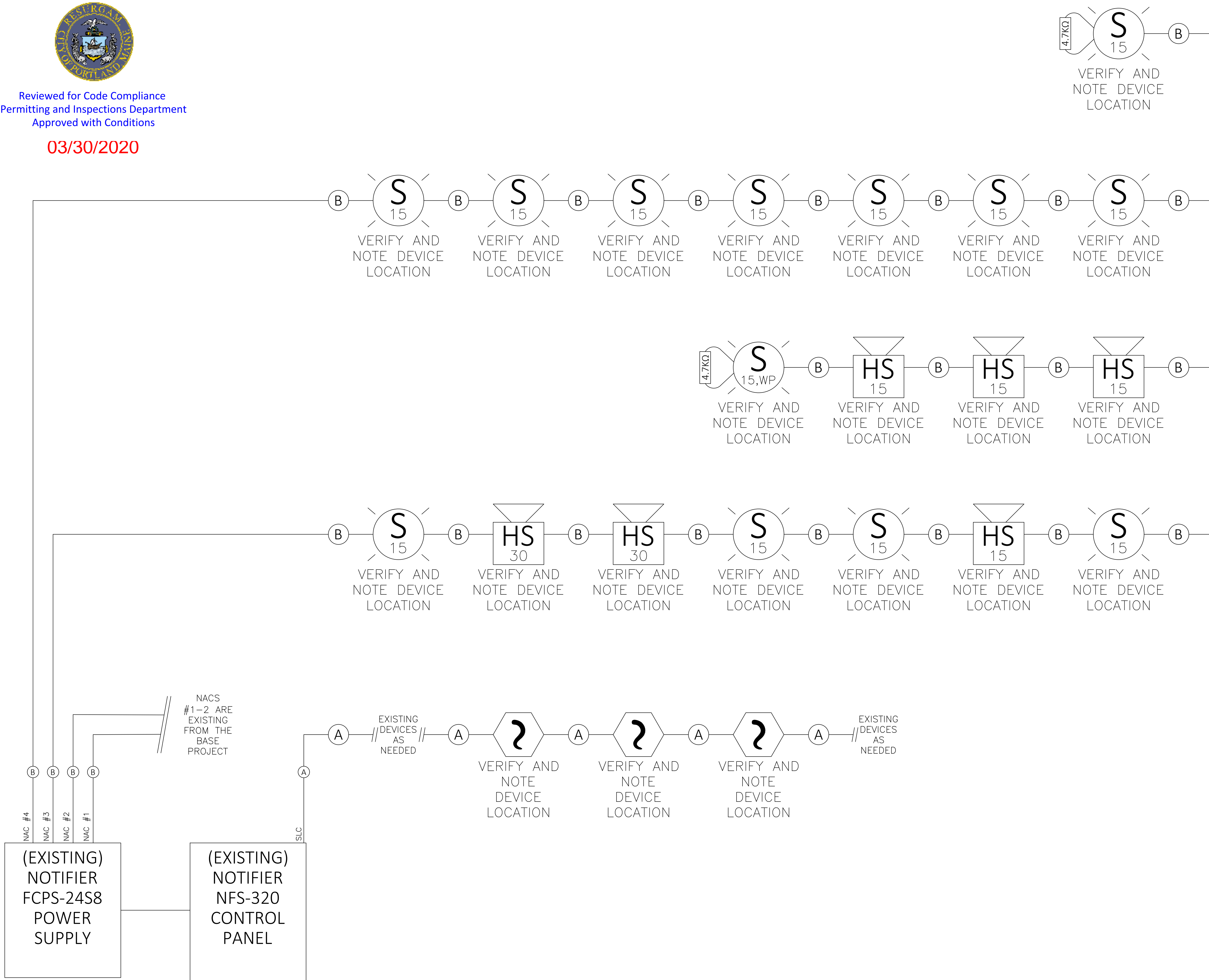
Spare Battery Capacity	4.79	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.34	Secondary Alarm Load (AH) * Derating Factor





Reviewed for Code Compliance  
 Permitting and Inspections Department  
 Approved with Conditions

03/30/2020



SYMBOL LEGEND

DEVICES		NOTIFICATION	
	SMOKE DETECTOR		HORN STROBE
ADDRESS AS AVAILABLE			STROBE
		XX = CANDELA RATING WP = WEATHERPROOF	

WIRE LEGEND

	2 COND 16 AWG TWISTED PAIR FPLP CABLE
	2 COND 14 AWG FPLP CABLE

DEVICE ADDRESSES:

EACH DEVICE MUST BE LABELED WITH THE NODE, LOOP AND SLC ADDRESS.  
 DEVICE EXAMPLE: N1L1D001      MODULE EXAMPLE: N1L1M001  
 CARBON MONOXIDE DETECTORS MUST BE LABELED WITH THE MANUFACTURER'S PLACEMENT DATE.  
 IMPORTANT! DUPLICATE ADDRESSES BETWEEN DEVICES AND MODULES ARE NOT AN ERROR. NOTE: FULL STATIONS ARE IDENTIFIED AS MODULES BY THE FIRE ALARM CONTROL PANEL.

INSTALLATION NOTES:

ALL FIELD WIRING SHALL BE INSTALLED IN CONDUIT.  
 FIELD WIRING SHALL BE INSTALLED FOLLOWING THE CURRENT EDITION OF NFPA 70: NATIONAL ELECTRIC CODE(2017), ALL APPLICABLE MUNICIPAL, COUNTY, & STATE CODES, REQUIREMENTS, AND REGULATIONS, AS WELL AS ALL MANUFACTURER GUIDELINES FOR INSTALLATION.

CONTROL PANELS, DEVICES, AND ALL OTHER SYSTEM COMPONENTS SHALL BE INSTALLED FOLLOWING THE CURRENT EDITION OF NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE(2019), ALL APPLICABLE MUNICIPAL, COUNTY, & STATE CODES, REQUIREMENTS, AND REGULATIONS, AS WELL AS ALL MANUFACTURER GUIDELINES FOR INSTALLATION.

THE INSTALLER SHALL FOLLOW CORRECT CONDUCTOR POLARITY, INDICATED CIRCUIT DIVISIONS, PROPER GROUNDING AND SHIELDING WITHOUT EXCEPTION. IMPROPER INSTALLATION CAN RESULT IN INTERFERENCE, TRANSIENT VOLTAGE, OR SHORT CIRCUITS CAUSING UNDESIRABLE OPERATION OR DAMAGE TO THE CONTROL PANEL, DEVICES AND ANY OTHER INTEGRATED COMPONENTS.

IF EXCEEDING 4500 FEET, THE GAUGE OF WIRE USED FOR THE SLC LOOP (IDENTIFIED AS 'A' ON THIS PRINT), SHALL BE DETERMINED BY THE INSTALLER FOLLOWING GUIDELINES AND LIMITATIONS SET FORTH BY THE MANUFACTURER (NOTIFIER DOCUMENT #51253, INTELLIGENT CONTROL PANEL SLC WIRING MANUAL). THE SLC WIRING RISER IS SHOWN DIAGRAMMATICALLY ONLY TO ALLOW FOR VARIANCES IN ACTUAL WIRE DISTANCE, DEVICE PLACEMENT AND STRUCTURAL OR ENVIRONMENTAL REQUIREMENTS.

WIRE FOR THE NOTIFICATION APPLIANCE CIRCUITS (IDENTIFIED AS 'B' ON THIS PRINT), SHALL FOLLOW THE SPECIFIC REQUIREMENTS OF THE WIRING LEGEND.

THIS SYSTEM MEETS NFPA REQUIREMENTS FOR OPERATION AT 32-120°F AND A RELATIVE HUMIDITY OF 91-95% AT 87-93°F. HOWEVER, THE USEFUL LIFE OF THE SYSTEM'S STANDBY BATTERIES AND THE ELECTRONIC COMPONENTS MAY BE ADVERSELY AFFECTED BY EXTREME TEMPERATURE RANGES AND HUMIDITY. THEREFORE, IT IS RECOMMENDED THAT THIS SYSTEM AND ITS PERIPHERALS BE INSTALLED IN AN ENVIRONMENT WITH A NORMAL ROOM TEMPERATURE OF 60-80°F.

DESIGN NOTES:

SYSTEM DESIGN PERFORMANCE AND COMPLIANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS IS THE RESPONSIBILITY OF THE DESIGNING ENGINEER. PROPER INSTALLATION OF THIS SYSTEM AND ITS COMPONENTS IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. ANY ALTERATIONS, CHANGES, OR DEFICIENCIES MUST BE BROUGHT TO THE ATTENTION OF THE DESIGNING ENGINEER.

NORRIS INC. ASSUMES NO RESPONSIBILITY FOR ERRORS IN SYSTEM DESIGN OR INSTALLATION, AS WELL AS ANY COSTS ASSOCIATED WITH CORRECTING THESE ERRORS, IF ANY EXIST, UNLESS SYSTEM DESIGN OR INSTALLATION WAS PERFORMED BY NORRIS INC.

RELAY & MONITOR MODULES:

CONNECTIONS FROM THE RELAY, AND MONITOR MODULES TO THE CONTROL EQUIPMENT, ALONG WITH ANY REQUIRED COMPONENTS SHALL BE FURNISHED BY THE INSTALLER.

REVISION 0: SUBMITTAL 03/11/2020

FIRE ALARM WIRING RISER

PROJECT NUMBER: 1703	SCALE: NONE
PROJECT: UNITED WAY SUITE RENO. 550 FOREST AVE. PORTLAND, MAINE 04101	DRAWN BY: JAB
	CHECKED BY: MP
	SHEET: FA-01



2257 BROADWAY SOUTH PORTLAND, MAINE



Permitting and Inspections Department

### Fire Alarm Permit Application

Construction Address: <b>550 Forest Ave.</b>		
Total Square Footage of Proposed Structure: <b>7100</b>		
Tax Assessor's Chart, Block & Lot Chart# <input type="text"/> Block# <input type="text"/> Lot# <input type="text"/>		Applicant Name: <b>Norris Inc.</b>
Cost of Work: \$ <b>5,000</b>		Address: <b>2257 West Broadway South Portland, ME. 04106</b>
Lessee/Owner Name (if different): <b>SSA Realty c/o Dirigo Management</b>		Phone: <b>207-883-3473</b>
Address: <b>One City Center Portland, ME. 04101</b>		Email: <b>melissap@norrisinc.com</b>
Phone: <b>871-1080</b>		Contractor Name (if different): <b>same</b>
Email: <b>gary@digirogmt.com</b>		Address: <input type="text"/>
Current use (i.e. single family): <b>n/a</b>		
If vacant, what was the previous use? <b>SSA</b>		
Proposed specific use: <b>United Way</b>		
Is property part of a subdivision? If yes, name: <b>No</b>		
Project description: <b>add, remove and relocate devices as needed for United Way reno</b>		
Life Safety Code Occupancy Classification: <b>existing office, new assembly</b>		
Is this new work or a renovation to an existing system? <b>reno</b>		
Is the top occupiable floor of the building greater than 75 feet above the lowest level of Fire Department access (high-rise)? <input type="checkbox"/> <b>NO</b>		
Name of company providing programming and certification of system*: <b>Norris Inc</b>		
Electrical permit #: <b>ERC-2020-02513</b>		
<b>Will a master box be installed?</b> <input type="radio"/> Yes <input checked="" type="radio"/> No <b>If yes, complete all items for approval):</b>		
AES approved installing contractor: <input type="text"/>		
Documentation of AES approval: <input type="text"/>		
Property Owner: <input type="text"/>		
Property Owner Billing Address: <input type="text"/>		
Property common name: <input type="text"/>		
E-911 address for protected premises: <input type="text"/>		
Emergency contact phone: <input type="text"/> Additional emergency contact phone: <input type="text"/>		
Number of stories protected: <input type="text"/>		
Is the building protected by a supervised, automatic sprinkler system? <input type="radio"/> Yes <input checked="" type="radio"/> No		
Name of person to contact when the permit is ready: <b>Norris Inc-- Melissa Peter</b>		
Address: <b>same as above</b>		
City, State & Zip: <input type="text"/>		
Email Address: <b>melissap@norrisinc.com</b>		Phone: <input type="text"/>

\*For a list of approved fire alarm companies, see [www.portlandmaine.gov/1486/Approved-Fire-Alarm-Companies](http://www.portlandmaine.gov/1486/Approved-Fire-Alarm-Companies)