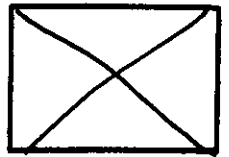




Type



Plans

BLD 12-3061

Permit Number

21780

Street Number

HWY 1

Street Name

TIM

Community Code

109-070-009

APN

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print
Your Name:

Cory Creath

Date

Applied:

8/2/12

INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY

Site Address: 21780 Hwy 1	City: Jenner	45%	ZIP: 0
Cross-Street: Timber Cove Rd	APN: 109-070-009	Project Phone #: ()	Project Fax #: ()
Directions:	Email address: bob.olson@rdolson.com	Unit #	Lot #
Describe Project: Remodel of 8 Rooms @ Renewal of Permit # TO COMP BLDG 7-5407		Living Area	Contract Price:
		Garage	
		Decks	

OWNER NAME AND ADDRESS

APPLICANT NAME AND ADDRESS

Name: Timber Cove Inn	Name: Robert Olson
Mailing Address: 21780 & 21850 Hwy 1	Mailing Address: 21780 & 21850 Hwy 1
City: Jenner	City: Jenner
State: CA	State: CA
ZIP: 94550	ZIP: 94550
Day Ph: (707) 847-3231	Day Ph: (707) 714 321-2050
Fax: ()	Fax: ()

CONTRACTOR INFORMATION

OTHER PERSONS (ARCHITECT, ENGINEER, ETC.)

Company Name: T.B.D.	Name:
Address:	Address:
City:	City:
State:	State:
ZIP:	ZIP:
Day Ph: ()	Day Ph: ()
Fax: ()	Fax: ()

WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:
☐ I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
☐ I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:

Carrier _____
Policy No. _____

(This section need not be completed if the permit is for one hundred dollars (\$100) or less).

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Exp. Date: _____ Applicant: _____

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.).

☒ I am exempt under Sec. 7031.5, B & P.C. for this reason: Architect

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following website: <http://www.leginfo.ca.gov/calaw.html>.

Date: 8/2/12 Signature of Property Owner or Authorized Agent: Robert Olson

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Class _____ Lic. No. _____

Exp. Date _____ Contractor _____

ASBESTOS DECLARATION

Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that (☐ does) (☐ does not) contain asbestos, or that ☐ no demolition is authorized by this permit.

I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation law, this permit shall be deemed revoked.

PERMITTEE SIGNATURE: Robert Olson

ADDRESS _____ CITY _____ ZIP _____

☐ Contractor ☒ Owner ☐ Other Licensed Professional

THIS PERMIT SHALL EXPIRE IN 180 DAYS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT

CONSTRUCTION LENDING DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Sec. 3097, Civ. C.).

Lenders Name _____

Lenders Address _____

FOR DEPARTMENT USE

Zoning _____	File No. _____	Acres _____
Existing Use/Structures _____		
Proposed Use/Structures _____		
Zoning Min. Yard Requirements: Front _____ Left _____ Right _____ Back _____		
NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated. <input type="checkbox"/> Mitigation Required <input type="checkbox"/> Address subject to change		
Approval for Permit Issuance: _____	Approval for Occupancy: _____	
By: _____	By: _____	
Date: _____	Date: _____	
Conditions: _____		

Sewer Connection: ☐ Available ☐ Fees Paid

Approved by: _____ Date: _____

Road Encroachment: ☐ Fees Paid

Approved by: _____ Date: _____

Septic System Permit/Clearance # _____

Approved by: _____ Date: _____

Flood Zone: ☐ Yes ☒ No 100 Year Flood Elevation: _____

Site Review _____

Drainage Review: _____

Approved by: _____ Date: _____

Fire: _____

Approved by: _____ Date: _____

Code Enforcement Violation ☒ Yes ☐ No Violation # VB007-0201

This permit is limited to 150 days.

OK TO ISSUE PERMIT. WORK CLEAR THIS VIOLATION WHEN FINISHED. LHM

Work Authorized: _____

complete BLDG. 5407

<input checked="" type="checkbox"/> Plans Approved	<input type="checkbox"/> Post FIRM	<input type="checkbox"/> Alquist Priolo Report Available
<input type="checkbox"/> No Plans Subject to Field Inspection	<input type="checkbox"/> Pre FIRM	<input type="checkbox"/> Geotechnical report Available
Planchek _____	Date: 8/6/12	Type of Construction: VB
Cleared By: _____	Occupancy: 2	No. of Bedrooms: 2
Permit Cleared for issuance By: _____	Date: 8/6/12	Auto. Fire Sprinklers Req'd: Yes
Machine Space for Permit Fee		Certificate of Occupancy

PAYMENT REC'D

\$ _____
AUG 06 2012

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
COUNTY OF SONOMA

Blue-Assessor Cardstock - Inspector

JOB ADDRESS: 21780 Hwy 1 Tim

PERMIT NUMBER: BLD 13-3061

INSPECTION AREA: 8

SMC

SLEMBROUCK-MANY CORPORATION
1350 INDUSTRIAL AVE., SUITE G
PETALUMA, CALIFORNIA 94952
CALL: 707/ 778-0170
FAX: 707/ 778-0177
LIC. #467598

EQUIPMENT SUB.

PROJECT # 6114
DATE: 07/06/15

	Timber Cove ADA Rooms
--	-----------------------

Model&Description	Qty
-------------------	-----

6114 Timber Cove ADA Rooms**0 - None**

NC-100 Control module	4
NMM-100P Monitor module	4
LLFHNR-CO Low frequency horn	4
STR Strobe	4
FCPS-24S6 Remote extender panel	1

FCPS-24S6(C/E) & FCPS-24S8(C/E)

6- & 8-Amp 24-Volt Remote Power Supplies



Power Supplies

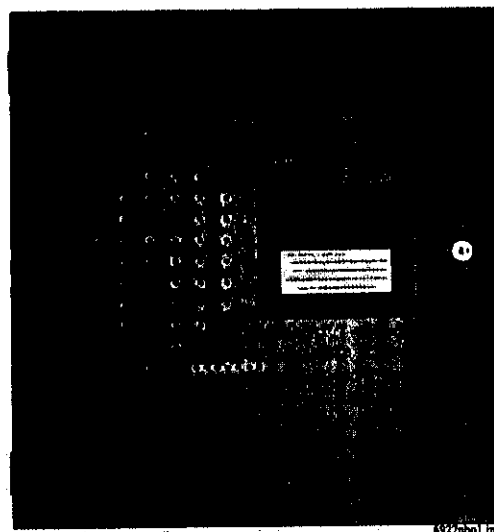
General

The FCPS-24S6E (6-amp) and FCPS-24S8E (8-amp) are remote power supplies with battery charger. The FCPS-24S6/-24S8 may be connected to any 12 or 24 volt fire alarm control panel (FACP) or may be used as stand-alone supplies. Primary applications include notification appliance (bell) circuit (NAC) expansion (to support ADA requirements and NAC synchronization) or auxiliary power to support 24 volt system accessories. The FCPS-24S6/-24S8 provides regulated and filtered 24 VDC power to four notification appliance circuits configured as either four Class B (Style Y) or Class A (Style Z, with ZNAC-4 option module). Alternately, the four outputs may be configured as all non-resettable, all resettable or two non-resettable and two resettable. The FCPS-24S6/-24S8 also contains a battery charger capable of charging up to 18 AH batteries. FCPS-24S6C & FCPS-24S8C are ULC-listed.

NOTE: Unless otherwise specified, the terms FCPS-24S6 and FCPS-24S8 used in this document refers to the standard FCPS-24S6 and FCPS-24S8, FCPS-24S6C and FCPS-24S8C, the FCPS-24S6E and FCPS-24S8E

Features

- UL-Listed NAC synchronization using System Sensor, Wheelock, or Gentex "Commander²" appliances.
- Operates as a "sync-follower" or as a "sync-generator" (default). See note on page 2.
- Contains two fully-isolated input/control circuits - triggered from FACP NAC (NAC expander mode) or jumped permanently "ON" (stand-alone mode).
- Four Class B (Style Y) or four Class A (Style Z, with ZNAC-4 module) NACs.
- 6-amp (FCPS-24S6) or 8-amp (FCPS-24S8) full load output, with 3 amps maximum/circuit, in NAC expander mode (UL 864).
- 4-amp (FCPS-24S6) or 6-amp (FCPS-24S8) continuous output in stand-alone mode (UL 1481).
- Compatible with coded inputs; signals passed through.
- Optional power-supervision relay (EOLR-1).
- In stand-alone mode, output power circuits may be configured as: resettable, (reset line from FACP required), non-resettable, or a mix of two and two.
- Fully regulated and filtered power output - optimal for powering four-wire smoke detectors, annunciators, and other system peripherals requiring regulated/filtered power.
- Power-limiting technology meets UL power-limiting requirements.
- Form-C normally-closed trouble relay.
- Fully supervised power supply, battery, and NACs.
- Selectable earth fault detection.
- AC trouble report selectable for immediate 2-hour delay.
- Works with virtually any UL 864 fire alarm control which utilizes an industry-standard reverse-polarity notification circuit (including unfiltered and unregulated bell power).
- Requires input trigger voltage of 9 - 32 VDC.
- Self-contained in compact, locking cabinet - 15"H x 14.5"W x 2.75"D (cm: 38.1H x 36.83W x 6.985D).



- Includes integral battery charger capable of charging up to 18 AH batteries. Cabinet capable of housing 7.0 AH batteries.
- Battery charger may be disabled via DIP switch for applications requiring larger batteries.
- Fixed, clamp-type terminal blocks accommodate up to 12 AWG (3.1mm²) wire.

Specifications

Primary (AC) Power:

- FCPS-24S6C/-24S8C: 120 VAC, 60 Hz, 3.2A maximum.
- FCPS-24S6E/-24S8E: 240 VAC, 50 Hz, 1.6A maximum.
- Wire Size: minimum #14 AWG (2.0mm²) with 600 V insulation.

Control Input Circuit:

- **Trigger Input Voltage:** 9 to 32 VDC.
- **Trigger Current:** 2.0 mA (16 - 32 V); Per Input: 1.0 mA (9 - 16 V).

Trouble Contact Rating: 5 A at 24 VDC.

Auxiliary Power Output: Specific application power 500 mA maximum.

Output Circuits:

- +24 VDC filtered, regulated.
- 3.0 A maximum for any one circuit.
- Total continuous current for all outputs (stand-alone mode):
 - FCPS-24S6: 4.0 A maximum.
 - FCPS-24S8: 6.0 A maximum.
- Total short-term current for all outputs (NAC expander mode):
 - FCPS-24S6: 6.0 A maximum.
 - FCPS-24S8: 8.0 A maximum.

Secondary Power (Battery) Charging Circuit:

- Supports lead-acid batteries only.
- Float-charge voltage: 27.6 VDC.

- Maximum current charge: 1.5 A.
- Maximum battery capacity: 18 AH.

Applications

Example 1: Expand notification appliance power an additional 6.0 A (FCPS-24S6) or 8.0 A (FCPS-24S8). Use up to four Class B (Style Y) outputs or four Class A (Style Z) outputs (using ZNAC-4). For example, the FACP notification appliance circuits will activate the FCPS when reverse-polarity activation occurs. Trouble conditions on the FCPS are sensed by the FACP through the notification appliance circuit.

Example 2: Use the FCPS to expand auxiliary regulated 24-volt system power up to 4.0 A (FCPS-24S6) or up to 6.0 A (FCPS-24S8). Both resettable and non-resettable power options are available. Resettable outputs are created by connecting the resettable output from the FACP to one or both of the FCPS inputs.

Example 3: Use addressable control modules to activate the FCPS instead of activating it through the FACP notification appliance circuits. This typically allows for mounting the FCPS at greater distances* away from the FACP while expanding system architecture in various applications.

For example, an addressable control module is used to activate the FCPS, and an addressable monitor module is used to sense FCPS trouble conditions. Local auxiliary power output from the FCPS provides power to the addressable control module.

***NOTE:** Addressable FACP's are capable of locating control and monitor modules at distances of up to 12,500 feet (3,810 meters).

Sync Follower/Generator Note

In some installations, it is necessary to synchronize the flash timing of all strobes in the system for ADA compliance. Strobes accomplish this by monitoring very short timing pulses on the NAC power which are created by the FACP. When installed at the end of a NAC wire run, the FCPS-24S6/-24S8 can track (i.e. "follow") the strobe synchronization timing pulses on the existing NAC wire run. This maintains the overall system flash timing of the additional strobes attaches to the FCPS.

When the FCPS-24S6/-24S8 is configured (via DIP switch settings) as a "sync follower," the FCPS's NAC outputs track the strobe synchronization pulses present at the FCPS's sync input terminal. The pulses originate from an upstream FACP or other power supply.

When the FCPS-24S6/-24S8 are configured (via DIP switch settings) as a "sync generator," the FCPS's sync input terminals are not used. Rather, the FCPS is the originator of the strobe synchronization pulses on the FCPS's NAC outputs. In "sync generator" mode, the sync type (System Sensor, Wheelock, or Gentex) is selectable via DIP switch settings.

Standards and Codes

The FCPS-24S6 and FCPS-24S8 comply with the following standards:

- **NFPA 72** National Fire Alarm Code.
- **UL 864** Standard for Control Units for Fire Alarm Systems (NAC expander mode).
- **UL 1481** Power Supplies for Fire Alarm Systems.

Agency Listings and Approvals

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

- **UL Listed:** S635, S674
- **ULC Listed:** S635 (FCPS-24S6C & FCPS-24S8C)
- **CSFM Approved:** 7315-0028:225
- **MEA:** 299-02-E
- **FM Approved**

Ordering Information

FCPS-24S6: 6.0 A, 120 VAC remote charger power supply. Includes main printed circuit board, transformers, enclosure (15"H x 14.5"W x 2.75"D [cm: 38.1H x 36.83W x 6.985D]), and installation instructions.

FCPS-24S6C: Same as above, ULC-listed.

FCPS-24S6R: Same as FCPS-24S6 with red enclosure.

FCPS-24S6E: 6.0 A, 240 VAC remote charger power supply. Includes main printed circuit board, transformers, enclosure (15"H x 14.5"W x 2.75"D [cm: 38.1H x 36.83W x 6.985D]), and installation instructions.

FCPS-24S8: 8.0 A, 120 VAC remote charger power supply. Includes main printed circuit board, transformers, enclosure (15"H x 14.5"W x 2.75"D [cm: 38.1H x 36.83W x 6.985D]), and installation instructions.

FCPS-24S8C Same as above, ULC-listed.

FCPS-24S8R: Same as FCPS-24S8 with red enclosure.

FCPS-24S8E: 8.0 A, 240 VAC remote charger power supply. Includes main printed circuit board, transformers, enclosure (15"H x 14.5"W x 2.75"D [cm: 38.1H x 36.83W x 6.985D]), and installation instructions.

ZNAC-4: Class A (Style Y) NAC option module.

EOLR-1: 12/24 VDC end-of-line relay for monitoring four-wire smoke detector power.

BAT-1270: Battery, 12-volt, 7.0 AH (two required, see BAT Series data sheet DN-6933).

PS-1270: Battery, 12-volt, 7.0 AH (two required, see PS Series data sheet DN-1109)

System Sensor® and NOTIFIER® are registered trademarks of Honeywell International Inc.
©2009 by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.



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: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

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



LISTING SERVICE

LISTING No. 7315-0028:0225

Page 1 of 1

CATEGORY: 7315 -- POWER UNITS

LISTEE: NotifierOne Fire-Lite Place, Northford, CT 06472-1653
Contact: Vladimir Kireyev (203) 484-6277 Fax (203) 484-7309
Email: vladimir.kireyev@honeywell.com

DESIGN: Models FCPS-24S6 and FCPS-24S8 are power limited power supply/battery chargers used for supervision and expanded power driving capability of up to four Notification Appliance Circuits (FACP Fire Circuits, Signaling Devices) or resettable/non resettable outputs. Model ZNAC-4 Class A converter. Refer to listee's data sheet for additional detailed product description and operational considerations.

RATING: 120 VAC, 24 VDC

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee's name, model number, electrical rating and UL label.

APPROVAL: Listed as a Power Supply/Battery Charger for use with separately listed compatible fire alarm control units.

XLF: 7315-0075:0206

1-24-03KK



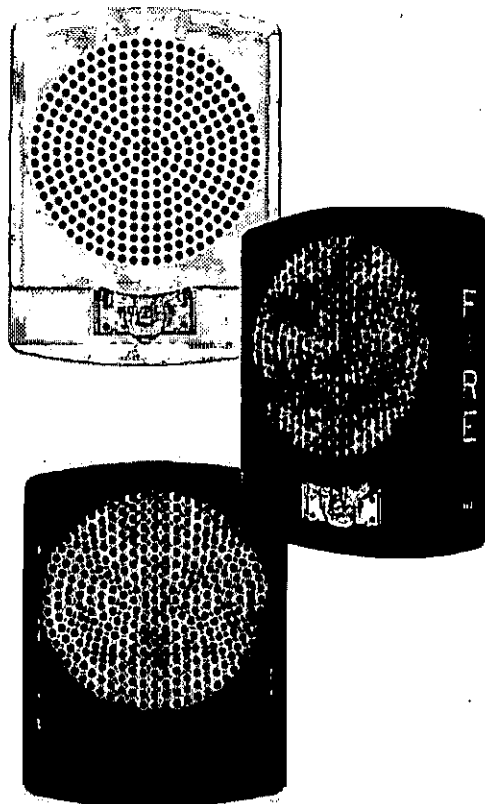
This listing is based upon technical data submitted by the applicant. CSFM Fire Engineering staff has reviewed the test results and/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not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

Date Issued: July 01, 2015

Listing Expires June 30, 2016

Authorized By: JAMES PARSESIAN, Program Coordinator
Fire Engineering Division

Exceder LED Low Frequency Sounder Strobes and Sounders



Description

Eaton's Cooper Notification business has developed the Wheelock Exceder LED Low Frequency Sounder Strobes and Sounders to meet the new National Fire Protection Association (NFPA) low frequency sounder requirements for sleeping rooms - NFPA 72 for fire alarm and NFPA 720 for Carbon Monoxide (CO) alarm. In a single device, the Exceder LED Low Frequency Sounders can provide alarm signals for dual applications-T3 (Fire) and T4 (CO) tones. It is the first product in the industry to be listed to the audibility requirements of UL 2034 and UL 2075 for CO applications.

The Exceder LED Low Frequency Sounder Strobes and Sounders feature multiple 520 Hz modes of operation: T3 (fire), T4 (CO), Continuous, T3/T4 Sync Control.

The 520 tone is generated within the appliance itself. When the selector switch is set for T3 or T4, the sound pattern is also generated within the appliance. When the selection switch is set to continuous, the product is listed for coded operations. The T3/T4 pattern or other pattern must be generated by the FACP according to the alarm condition sensed by the panel (fire or CO alarm).

When the device is set to T3/T4, the appliance can switch from T3 to T4 based upon the condition sensed by the FACP and passed to the Wheelock DSM module.

Like the entire Wheelock Exceder LED product line, the Low Frequency Sounder Strobes will utilize Light Emitting Diode (LED) as the light source—a breakthrough optical design, resulting in best-in-class efficiency that enables material and system cost savings, allowing for a greater number of appliances on the notification appliance circuit and fewer power supplies. All LLFHS strobe models include a 110 candela setting.

Providing a sleek aesthetic appearance, the Exceder LLFHS and LLFHN models feature one of the industry's smallest footprints and a sleek, modern, low-profile design. Installers will benefit from its comprehensive feature list, multiple 520 Hz modes of operation, lowest current draw, no tools needed for setting changes, and convenient mounting options. These products are suitable for indoor wall-mount applications. The Sounder and Sounder Strobe models are for 24V operation.

Exceder LED Sounder Strobes may be synchronized when used in conjunction with the DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. Wheelock synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy.

The Exceder LED Low Frequency Sounders and Sounder Strobes are UL Listed for indoor use under Standard 1971 and 464 and ULC under S525 and S526. The appliances are Restriction of Hazardous Substances (RoHS) compliant and contain no mercury or other hazardous substances.

EATON

Powering Business Worldwide

Features

- Meets dual low frequency sounder codes for sleeping rooms in a single device
 - NFPA 72 for fire alarm
 - NFPA 720 for CO alarm
- 4 Settings in 1 device
 - T3 (fire)
 - T4 (CO)
 - Continuous (Coded)
 - T3/T4
- Energy efficient
 - Patented LED technology provides industry's lowest current draw
- Low-profile design
 - Smallest footprint with sleek, modern aesthetics
- 110 candela setting
- Easy-to-install
 - Finger slide switches—No tools needed for setting changes
 - Built-in level adjustment feature and snap-on grille cover
 - IN/OUT screw terminals using #12 to #18 AWG wires
 - Mounting Options include Exceder LSPKBB backboxes and 4" square backboxes
- Strobe synchronization components
 - Meet synchronizing standards with Wheelock's DSM Sync Modules or PS-6/8 Power Supplies
- Compliance
 - UL 2034, UL 2075, UL 1971, UL 464, ULC S525, ULC S526
 - California State Fire Marshal (CSFM)
 - ADA/NFPA/ANSI/OSHA
 - RoHS

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 NOTIFICATION 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.

General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range." Note that NFPA-72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second.
- All candela ratings represent minimum effective Strobe intensity based on UL 1971.

Drawings

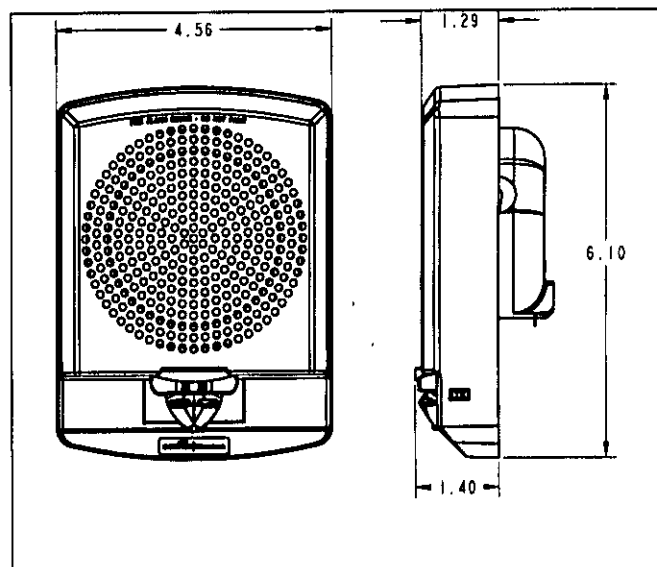


Figure 1. Wall Low Frequency Sounder Strobe

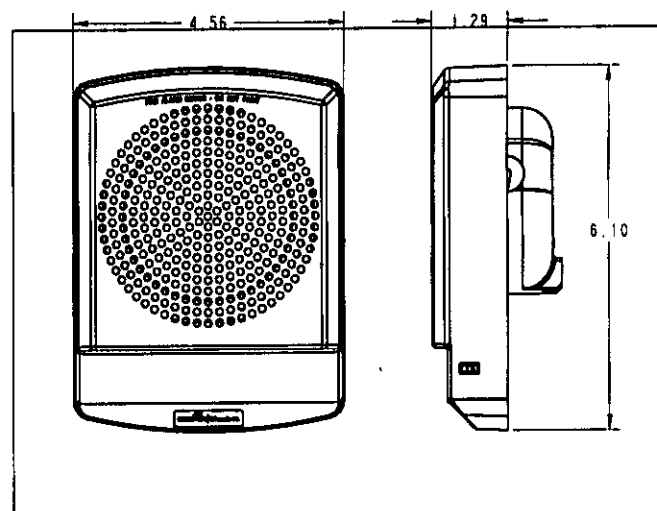


Figure 2. Wall Low Frequency Sounder

Table 1. Horn Strobe Current Draw

Exceder LED Sounder Strobes		UL/ULC Max Current *
		24VDC
Model	Horn Setting	16-33 Volts 110 cd
LLFHS	Continuous	0.292
	Code 3	0.292
	Code 4	0.292
	Code 3/Code 4	0.292

Table 2. Horn Only Current Draw

Exceder LED Sounders		UL/ULC Max Current *
		24VDC
Model	Horn Settings	16.0-33.0
LLFHN	Continuous	0.113
	Code 3	0.113
	Code 4	0.113
	Code 3/Code 4	0.113

Table 3. Sound Output (SPL) - UL

LLFHS/LLFHN 24V Reverberant dBA per UL 484			
Description	16.0V	24.0V	33.0V
Continuous	80	80	80
Code 3	76	76	76
Code 4 ^b	85	85	85
Code 3/Code 4	76	76	76

Table 4. Sound Output (SPL) - ULC

LLFHS/LLFHN dBA per ULC 8625-07 ^c			
Description	16.0V	24.0V	33.0V
Continuous	80	80	80
Code 3	80	80	80
Code 4	80	80	80
Code 3/Code 4	80	80	80

Table 5. Specification & Ordering Information

Model	Strobe Candela	Red	White	Lettering	Sync w/ DSM or Wheelock Power Supplies
Sounder Strobes					
LLFHSR	110	X		FIRE	X
LLFHSW	110		X	FIRE	X
LLFHSR-AL	110	X		ALERT	X
LLFHSW-AL	110		X	ALERT	X
LLFHSR-CO	110	X		CO	X
LLFHSW-CO	110		X	CO	X
LLFHSR-N	110	X		No Lettering	X
LLFHSW-N	110		X	No Lettering	X
Sounders					
LLFHN-AL		X		ALERT	X
LLFHNW-AL			X	ALERT	X
LLFHN-CO		X		CO	X
LLFHNW-CO			X	CO	X
LLFHN-N		X		No Lettering	X
LLFHNW-N			X	No Lettering	X
Accessories					
LSPKBB-R	0756	Description		Red	White
LSPKBB-W	0757	Exceder LED Backbox		X	
		Exceder LED Backbox			X

Table 6. Specifications

Physical	
Material	Red or white textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating
Weight	1.10 lbs.
Lens	Light Emitting Diode (LED) in a rugged Lexan lens
Dimensions	6.1" H x 4.56" W x 1.4" D
Operating Temperature	Indoor: 33.8°F to 120.2°F (0°C to 49°C) and maximum humidity of 85%
Mounting & Wire Connections	
Mounting (indoor only)	Wall-mount applications for sounder strobe (LLFHS); Wall and ceiling-mount applications for the sounder only model (LLFHN). Exceder LSPKBB backboxes or to 4" square backboxes
Wire Connections	#12 through #18 AWG
Power & General	
Operating voltage	24 VDC; 16- 33 VDC
Strobe Output Rating	UL 1971: 110 candela output
Strobe Flash Rate	Strobes are designed to flash at 1 flash per second
Synchronization Models	Strobes can be synchronized with Wheelock's DSM Sync Modules, PS-6/8 Power Supplies, using Wheelock patented sync protocol
Temporal Audible Pattern	Continuous, Code 3, Code 4 or Code 3/Code 4 Sync Control. The Code 3 temporal pattern (1/2 second on, 1/2 second off, 1/2 second on, 1/2 second off, 1/2 second on, 1-1/2 off and repeat) is specified by ANSI and NFPA 72 for standard emergency evacuation signaling. The Code 4 temporal pattern (four cycles of 100 milliseconds ± 10 percent "on" and 100 milliseconds ± 10 percent "off," followed by 5 seconds ± 10 percent "off") is specified by NFPA 720.

- ^a RMS current ratings are per UL maximum RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33v). For strobes the UL max current is usually at the minimum listed voltage. For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation instructions.
- ^b Code 4 setting rated per UL 2075, UL 2034.
- ^c For dwelling use only.

Architects and Engineers Specifications

The low frequency sounders and sounder strobes appliances shall be Wheelock® Exceder™ LED Series LLFHN Sounder for wall- and ceiling-mount applications and LLFHS Sounder Strobe for wall-mount applications with a low-profile design or approved equals. The sounders shall be UL Listed under UL 464 for Fire Protective Service and to the requirements of UL 2034/UL 2075 for CO applications and ULC S525. Sounders equipped with strobes shall be listed under UL 1971 for Emergency Devices for the Hearing-Impaired and ULC S526. The Series shall be Restriction of Hazardous Substances (RoHS) compliant and contain no mercury or other hazardous substances. In addition, the sounder strobes shall meet the requirements of FCC Part 15. 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 16 to 33 VDC.

The Series LLFHS Sounder Strobe shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Light Emitting Diode (LED) as the light source with a rugged Lexan® lens. The Series shall be of low current design. The strobe intensity shall have a 110 candela for wall mount applications.

The audible shall have a minimum of four (4) 520 Hz modes of operation: T3 (fire), T4 (CO), Continuous, T3/T4 Sync Control.

The Series LLFHS and LLFHN shall be designed for indoor surface

or flush mounting. Mounting options shall include LED speaker backboxes and to standard 4" square backboxes. The sounder and sounder strobe shall incorporate a mounting plate with a snap-on grille cover and shall mount to standard electrical hardware requiring no additional trimplate or adapter. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). All notification appliances shall be backwards compatible.

The Series LLFHN wall model shall have a low profile measuring 6.1" H x 4.56" W x 1.29" D. The Series LLFHS wall model shall have a low profile measuring 6.1" H x 4.56" W x 1.4" D. Finish shall be red or white. Special lettering, ALERT, CO and No lettering, shall be available.

When synchronization is required, the appliance shall be compatible with Wheelock's DSM Sync Modules, PS 6/8 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 patented sync protocol.

UL 1971, UL 464, ULC S525, ULC S526, CSFM, FCC, 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 Cooper Notification standard terms and conditions.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Cooper Notification
273 Branchport Ave.
Long Branch, NJ 07740
CooperNotification.com

© 2014 Eaton
All Rights Reserved
Printed in USA
Publication No. TD001009EN
November 2014



Eaton is a registered trademark.

All other trademarks are property
of their respective owners.

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



LISTING SERVICE

LISTING No. 7125-0785:0182

Page 1 of 1

CATEGORY: 7125 -- FIRE ALARM DEVICES FOR THE HEARING IMPAIRED

LISTEE: Cooper Wheelock Inc. 7246 16th St. E., Ste. 105, Sarasota, FL 34243
Contact: Tom Conover (941) 487-2336
Email: thomas.conover@cooperindustries.com

DESIGN: Model LLFHS low frequency synchronous or non-synchronous horn/strobe. The model may be followed by a letter indicating product color. The model number may also be followed by a hyphen and one or two alphanumeric characters indicating lettering. Refer to listee's data sheet for additional detailed product description and operational considerations.

RATING: 16-33 Vdc/Vfwr

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee's name, model number, electrical/candela rating, and UL label.

APPROVAL: Listed as a low frequency horn/strobe for the hearing impaired when used with a separately listed electrically compatible fire alarm control unit. Intended for wall mount indoor use only. This unit can generate a low frequency alarm signal for sleeping areas in accordance with NFPA 72. Refer to listee's Installation Instructions Manual for details.

06-10-14 gt



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

Date Issued: July 01, 2015

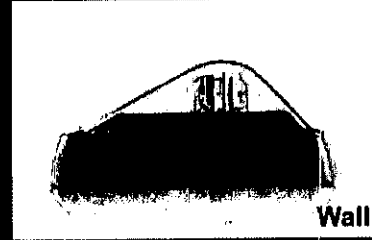
Listing Expires June 30, 2016

Authorized By: JAMES PARSEGAN, Program Coordinator

Fire Engineering Division



Strobe, Horn Strobe, and Horn Notification Appliances



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.

- Save up to 48% in current draw*
- Up to 9 models now in 1 appliance
- Save up to 14% cost of installation**



Sleek Modern Aesthetics



Finger Slide Switches



Voltage Test Points



Multiple Voltages



3 Audible Settings
90, 95, 99 dB



8 Candela Settings ***
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



Environmentally Friendly
Low Current Draw

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

* Compared to competitive models

*** Patented

** Compared to previous models

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 NOTIFICATION 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.

General Notes:

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 48°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).

Low Current Draw = Fewer Power Supplies

Strobe Ratings per UL Standard 1971

Model		UL Max Current*													
		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					

Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC

Model		UL Max Current* 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		UL Max Current* 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	0.272	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		UL Max Current* 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					

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



* 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.

Specification & Ordering Information

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

Easy to remember model codes

8 candela on 1 device

1 gang, 2 gang, 4" sq, 3.5" octal & 4" octal boxes

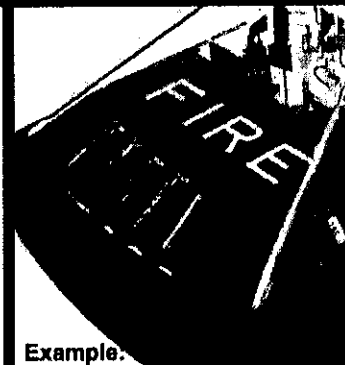
*12 VDC models feature 15 & 15/75 settings

**UMB = Universal Mounting Base

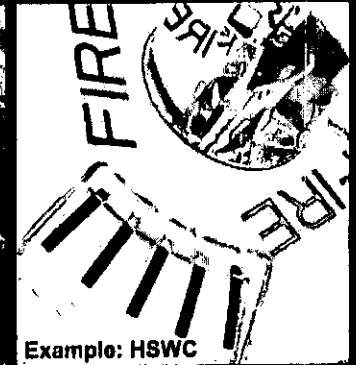
Model Legend

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

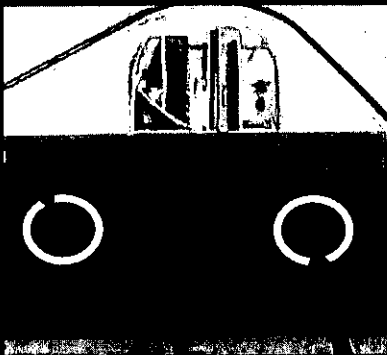
Example 1: STRC = Strobe, Red, Ceiling Mount
 Example 2: HSR = Horn Strobe, Red, Wall Mount
 Example 3: HSW = Horn Strobe, White, Wall Mount
 Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering



Example.

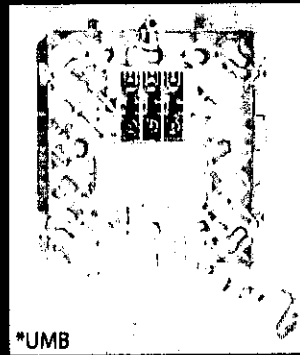


Example: HSWC

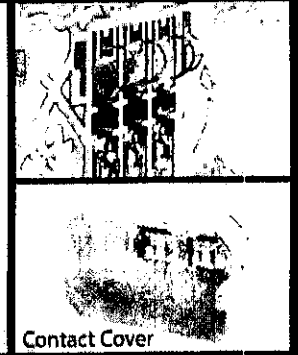


Voltage test points for quick troubleshooting and easy spot checking (wall models only)

8 candela settings



*UMB



Contact Cover

Common base for wall and ceiling with 5 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

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

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



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

Exceder - Spec Sheet 6/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

Cooper Notification is



COOPER Notification

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



LISTING SERVICE

LISTING No. 7125-0785:0168 Page 1 of 1

CATEGORY: 7125 -- FIRE ALARM DEVICES FOR THE HEARING IMPAIRED

LISTEE: Cooper Wheelock Inc. 7246 16th St. E., Ste. 105, Sarasota, FL 34243
Contact: Tom Conover (941) 487-2336
Email: thomas.conover@cooperindustries.com

DESIGN: Excuder Series: Models ST strobe, HS horn strobe and HN horn. Model ST is a synchronous and non-synchronous strobe light. Model HS a visual/audible appliance and Model HN is an audible signal appliance. All units followed by R (red) or W (white). Additionally, a 'C' may be added for ceiling models and/or a '-NR' may be added for non-resettable models. For non -NR models and optional 'S' for silver fascia may be added*. Refer to listee's data sheet for additional detailed product description and operational considerations.

RATING: Electrical: 12 VDC/24VDC/FWR
Candela (wall)*: 15, 15/75, 30, 75, 95, 110, 135 & 185
Candela (ceiling)*: 15, 30, 60, 75, 95, 115, 150, & 177

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction. All models are for indoor use and for wall mount only or ceiling mount only*

MARKING: Listee's name, model number, electrical/candela rating, and UL label.

APPROVAL: Listed as horn for fire alarm signaling and strobe, horn/strobe for the hearing impaired when used with separately listed electrically compatible fire alarm control units. Refer to listee's Installation Instructions Manual for details.

*Rev. 9-24-09 fm



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

Date Issued: **July 01, 2015**

Listing Expires **June 30, 2016**

Authorized By: **JAMES PARSESIAN, Program Coordinator**
Fire Engineering Division

Monitor Modules

**NMM-100(A), NMM-100P(A),
NZM-100(A), and NDM-100(A)
for FireWarden Series Panels**



Intelligent Addressable Devices

General

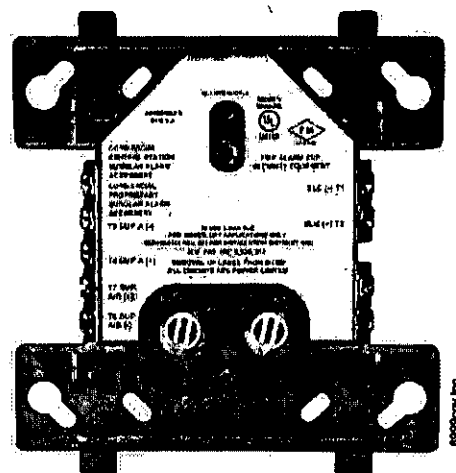
Four different monitor modules are available for Notifier's FireWarden Series intelligent control panels for a variety of applications. Monitor modules supervise a circuit of dry-contact input devices, such as conventional heat detectors and pull stations, or monitor and power a circuit of two-wire smoke detectors (NZM-100(A)).

NMM-100(A) is a standard-sized module (typically mounts to a 4" [10.16 cm] square box) that supervises either a Style D (Class A) or Style B (Class B) circuit of dry-contact input devices.

NMM-100P(A) is a miniature monitor module a mere 1.3" (3.302 cm) H x 2.75" (6.985 cm) W x 0.5" (1.270 cm) D that supervises a Style B (Class B) circuit of dry-contact input devices. Its compact design allows the NMM-100P(A) to be mounted in a single-gang box behind the device it monitors.

NZM-100(A) is a standard-sized module that monitors and supervises compatible two-wire, 24 volt, smoke detectors on a Style D (Class A) or Style B (Class B) circuit.

NDM-100(A) is a standard-sized dual monitor module that monitors and supervises two independent two-wire Style B (Class B) dry-contact initiating device circuits (IDCs) at two separate, consecutive addresses in intelligent, two-wire systems.



NMM-100(A) (Type H)

NMM-100(A) Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the control panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct Decode entry of address: 01 – 99 on FireWarden-100-2, 01 – 50 on FireWarden-50.
- LED flashes during normal operation and latches on steady to indicate alarm.

The NMM-100(A) Monitor Module is intended for use in intelligent, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. It provides either a two-wire or four-wire fault-tolerant Initiating Device Circuit (IDC) for normally-open-contact fire alarm and supervisory devices. The module has a panel-controlled LED indicator.

NMM-100(A) APPLICATIONS

Use to monitor a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact alarm activation devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 47K ohm End-of-Line Resistor (provided) terminates the Style B circuit. No resistor is required for supervision of the Style D circuit.

NMM-100(A) OPERATION

Each NMM-100(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

NMM-100(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.0 mA (LED on).

Average operating current: 350 μ A (LED flashing), 1 communication every 5 seconds, 47k EOL.

Maximum IDC wiring resistance: 40 ohms.

EOL resistance: 47K ohms.

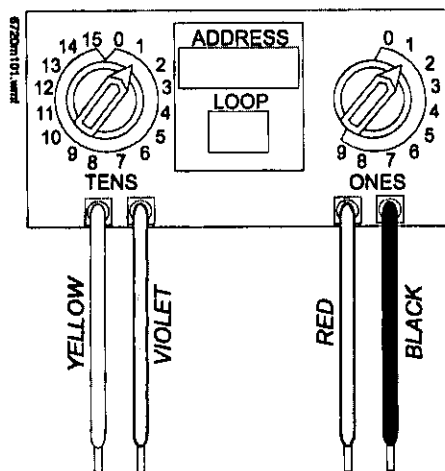
Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

NMM-100P(A) Mini Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- Tinned, stripped leads for ease of wiring.
- Direct Decade entry of address: 01 – 99 on FireWarden-100-2, 01 – 50 on FireWarden-50.



The NMM-100P(A) Mini Monitor Module can be installed in a single-gang junction directly behind the monitored unit. Its small size and light weight allow it to be installed without rigid mounting. The NMM-100P(A) is intended for use in intelligent, two-wire systems where the individual address of each module is selected using rotary switches. It provides a two-wire initiating device circuit for normally-open-contact fire alarm and security devices. NMM-100P(A)

NMM-100P(A) APPLICATIONS

Use to monitor a single device or a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit/device is wired as an NFPA Style B (Class B) Initiating Device Circuit. A 47K ohm End-of-Line Resistor (provided) terminates the circuit.

NMM-100P(A) OPERATION

Each NMM-100P(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC).

NMM-100P(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Average operating current: 350 μ A, 1 communication every 5 seconds, 47k EOL; 600 μ A Max. (Communicating, IDC Shorted).

Maximum IDC wiring resistance: 40 ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 400 μ A.

EOL resistance: 47K ohms.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 1.3" (3.302 cm) high x 2.75" (6.985 cm) wide x 0.65" (1.651 cm) deep.

Wire length: 6" (15.24 cm) minimum.

NZM-100(A) Interface Module

- Supports compatible two-wire smoke detectors.
- Supervises IDC wiring and connection of external power source.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct Decade entry of address: 01 – 99 on FireWarden-100-2, 01 – 50 on FireWarden-50.
- LED flashes during normal operation.
- LED latches steady to indicate alarm on command from control panel.

The NZM-100(A) Interface Module is intended for use in intelligent, addressable systems, where the individual address of each module is selected using built-in rotary switches. This module allows intelligent panels to interface and monitor two-wire conventional smoke detectors. It transmits the status (normal, open, or alarm) of one full zone of conventional detectors back to the control panel. All two-wire detectors being monitored must be UL compatible with the module.

NZM-100(A) APPLICATIONS

Use the NZM-100(A) to monitor a zone of two-wire smoke detectors. The monitored circuit may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 3.9 K ohm End-of-Line Resistor (provided) terminates the end of the Style B or D (class B or A) circuit (maximum IDC loop resistance is 25 ohms). Install ELR across terminals 8 and 9 for Style D application.

NZM-100(A) OPERATION

Each NZM-100(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

NZM-100(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.1 mA (LED on).

Maximum IDC wiring resistance: 25 ohms.

Average operating current: 300 μ A, 1 communication and 1 LED flash every 5 seconds, 3.9k eol.

EOL resistance: 3.9K ohms.

External supply voltage (between Terminals T3 and T4): DC voltage: 24 volts power limited. Ripple voltage: 0.1 Vrms maximum. Current: 90 mA per module maximum.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

NDM-100(A) Dual Monitor Module

The NDM-100(A) Dual Monitor Module is intended for use in intelligent, two-wire systems. It provides two independent two-wire initiating device circuits (IDCs) at two separate, consecutive addresses. It is capable of monitoring normally open contact fire alarm and supervisory devices. The module has a single panel-controlled LED.

NOTE: The NDM-100(A) provides two Style B (Class B) IDC circuits ONLY. Style D (Class A) IDC circuits are NOT supported in any application.

NDM-100(A) SPECIFICATIONS

Normal operating voltage range: 15 to 32 VDC.

Maximum current draw: 6.4 mA (LED on).

Average operating current: 750 μ A (LED flashing).

Maximum IDC wiring resistance: 1,500 ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 240 μ A

EOL resistance: 47K ohms.

Maximum SLC Wiring resistance: 40 Ohms.

Temperature range: 32° to 120°F (0° to 49°C).

Humidity range: 10% to 93% (non-condensing).

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 2.125" (5.398 cm) deep.

NDM-100(A) AUTOMATIC ADDRESSING

The NDM-100(A) automatically assigns itself to two addressable points, starting with the original address. For example, if the NDM-100(A) is set to address "26", then it will automatically assign itself to addresses "26" and "27".

NOTE: "Ones" addresses on the NDM-100(A) are 0, 2, 4, 6, or 8 only. Terminals 6 and 7 use the first address, and terminals 8 and 9 use the second address.



CAUTION:

Avoid duplicating addresses on the system.

Installation

NMM-100(A), NZM-100(A), and NDM-100(A) modules mount directly to a standard 4" (10.16 cm) square, 2.125" (5.398 cm) deep, electrical box. They may also be mounted to the SMB500 surface-mount box. Mounting hardware and installation instructions are provided with each module. All wiring must conform to applicable local codes, ordinances, and regulations. These modules are intended for power-limited wiring only.

The NMM-100P(A) module is intended to be wired and mounted without rigid connections inside a standard electrical box. All wiring must conform to applicable local codes, ordinances, and regulations.

Agency Listings and Approvals

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.

- UL: S635
- ULC: S635
- FM Approved
- CSFM: 7300-0028:0230 (NMM-100, NMM-100P, NZM-100); 7300-0028:0237 (NDM-100)

- MEA: 72-01-E Vol. 2 (NMM-100, NMM-100P, NZM-100); 227-03-E Vol. 3 (NDM-100)

Product Line Information

NOTE: "A" suffix indicates ULC-listed model.

NMM-100(A): Monitor module.

NMM-100P(A): Monitor module, miniature.

NZM-100(A): Monitor module, two-wire detectors.

NDM-100(A): Monitor module, dual, two independent Class B circuits.

SMB500: Optional surface-mount backbox.

NOTE: See Installation Instructions and refer to the SLC Wiring Manual, PN 52304.

Notifier® and FireWarden® are registered trademarks and FireWatch™ is a trademark of Honeywell International Inc.
©2010 by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS

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: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

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



LISTING SERVICE

LISTING No. 7300-0028:0230 Page 1 of 1

CATEGORY: 7300 -- FIRE ALARM CONTROL UNIT ACCESSORIES/MISC. DEVICES

LISTEE: NotifierOne Fire-Lite Place, Northford, CT 06472-1653
Contact: Vladimir Kireyev (203) 484-6277 Fax (203) 484-7309
Email: vladimir.kireyev@honeywell.com

DESIGN: Models NMM-100P, NMM-100, and NZM-100 monitor modules; Models NC-100R and NC-100 control modules; and *NZM-100-6 six zone interface signaling device module. Refer to listee's data sheet for additional detailed product description and operational considerations.

RATING: 15-32 VDC

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee's name, model number, electrical rating, and UL label.

APPROVAL: Listed as control unit accessories for use with listee's separately listed electrically compatible fire alarm control units. Refer to listee's Installation Instruction Manual for details.

XLF: 7300-0075:0185

08-23-11 rev. mt



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

Date Issued: **July 01, 2015**

Listing Expires **June 30, 2016**

Authorized By: **JAMES PARSEGAN, Program Coordinator**
Fire Engineering Division

NC-100(A)

Control Module for FireWarden Series Panels


Addressable

General

The NC-100(A) Addressable Control Module provides NOTIFIER's FireWarden Series intelligent control panels a supervised Class B (Style Y) or Class A (Style Z) circuit for Notification Appliances (horns, strobes, etc.). Addressability allows the NC-100(A) to be activated, either manually or through panel programming, on a select (zone or area of coverage) basis.

Features

- Built-in type identification automatically identifies these devices to the control panel.
- Internal circuitry powered directly by two-wire SLC loop. The NC-100(A) module requires power (for horns, strobes, etc.).
- Integral LED "blinks" when communicating, and turns on steady when activated.
- High noise immunity (EMF/RFI).
- The NC-100(A) may be used to switch 24-volt NAC power.
- Wide viewing angle of LED.
- SEMS screws with clamping plates for wiring ease.
- Direct Decade entry of address: 01 – 99 with FireWarden-100-2(C), or 01-50 with the FireWarden-50(C).

Applications

The NC-100(A) is used to switch 24 VDC audible/visual power.

Construction

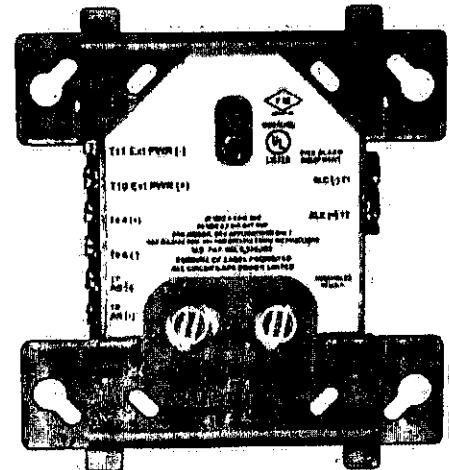
- The face plate is made of off-white heat-resistant plastic.
- Controls include two rotary switches for direct-dial entry of address setting.
- The NC-100(A) is configured for a single Class B (Style Y) or Class A (Style Z) Notification Appliance Circuit.

Operation

Each NC-100(A) uses one of the module addresses on a SLC loop. It responds to regular polls from the control panel and reports its type and status, including the open/normal/short status of its Notification Appliance Circuit (NAC). The LED blinks with each poll received. On command, it activates its internal relay. The NC-100(A) supervises Class B (Style Y) or Class A (Style Z) notification or control circuits.

Upon code command from the panel, the NC-100(A) will disconnect the supervision and connect the external power supply in the proper polarity across the load device. The disconnection of the supervision provides a positive indication to the panel that the control relay actually turned ON. The external power supply is always relay-isolated from the communication loop so that a trouble condition on the external power supply will never interfere with the rest of the system.

Rotary switches set a unique address for each module. The address may be set before or after mounting. The built-in TYPE CODE (not settable) will identify the module to the control panel.



NC-100(A)

Specifications

Normal operating voltage: 15 to 32 VDC.

Maximum SLC current draw: 6.5 mA (LED on).

Average operating current: 350 μ A (LED flashing).

External supply voltage: maximum 80 volts (RMS or DC).

Drain on external supply: 2 mA maximum (using internal EOL relay).

EOL resistance: 47K ohms.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% non-condensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

Agency Listings and Approvals

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.

- FM approved
- UL/ULC Listed: file S635.
- CSFM approved: file 7300-0028:230.
- MEA approved: file 72-01-E Vol. 2.

Contact Ratings

Current Rating	Maximum Voltage	Load Description	Application
3 A	30 VDC	Resistive	Non-Coded
2 A	30 VDC	Resistive	Coded
.9 A	110 VDC	Resistive	Non-Coded
.9 A	125 VDC	Resistive	Non-Coded
.5 A	30 VDC	Inductive (L/R=5ms)	Coded
1 A	30 VDC	Inductive (L/R=2ms)	Coded
.3 A	125 VAC	Inductive (PF=0.35)	Non-Coded
1.5 A	25 VAC	Inductive (PF=0.35)	Non-Coded
.7 A	70.7 VAC	Inductive (PF=0.35)	Non-Coded
2 A	25 VAC	Inductive (PF=0.35)	Non-Coded

Product Line Information

NC-100: Intelligent addressable control module.

NC-100(A): Intelligent addressable control module, ULC listed version.

SMB500: Optional surface-mount backbox.

CB500: Optional control module barrier, required by UL for separating power-limited and non-power-limited wiring in the same junction box as NC-100(A).

NOTE: For installation instructions, see document I56-2592-001 and refer to the SLC Wiring Manual, document 52304. The NC-100R(A) relay module, previously on this data sheet, is now on DN-60383.

NOTIFIER® is a registered trademark of Honeywell International Inc.
©2010 by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.



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.



Made in the U.S. A.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

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



LISTING SERVICE

LISTING No. 7300-0028:0230 Page 1 of 1

CATEGORY: 7300 – FIRE ALARM CONTROL UNIT ACCESSORIES/MISC. DEVICES

LISTEE: NotifierOne Fire-Lite Place, Northford, CT 06472-1653
Contact: Vladimir Kireyev (203) 484-6277 Fax (203) 484-7309
Email: vladimir.kireyev@honeywell.com

DESIGN: Models NMM-100P, NMM-100, and NZM-100 monitor modules; Models NC-100R and NC-100 control modules; and *NZM-100-6 six zone interface signaling device module. Refer to listee's data sheet for additional detailed product description and operational considerations.

RATING: 15-32 VDC

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee's name, model number, electrical rating, and UL label.

APPROVAL: Listed as control unit accessories for use with listee's separately listed electrically compatible fire alarm control units. Refer to listee's Installation Instruction Manual for details.

XLf: 7300-0075:0185

08-23-11 rev. mt



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

Date Issued: **July 01, 2015**

Listing Expires **June 30, 2016**

Authorized By: **JAMES PARSESIAN, Program Coordinator**
Fire Engineering Division

**ZFA STRUCTURAL ENGINEERS**

1212 Fourth Street, Suite 2

Santa Rosa, CA 95404

Voice: (707) 526-0992

Fax: (707) 526-0217

FIELD REPORT

Dave Smilgys

R.D. OLSON DEVELOPMENT

2955 Main Street, Third Floor

Irvine, CA 92614

Date: October 7, 2008

Project Number: 8003.02

Project Name: Timber Cove Inn

Contractor: D.A. French

Weather: Sunny

Time: 2:45 pm

Persons Present: Marianne Wilson (ZFA), David French (D.A. French)

Purpose of Visit: Review of Sonoma County correction notice structural comments dated 10/6/08

Work Observed:

- ☐ Notched posts at North wing walkway.
- ☐ Exposed existing foundation at pool wing.
- ☐ Structural framing at new North wing stair landing.

Remarks:

1. New 8x8 posts at the North wing walkway are adequate with notches at beams provided 4.25" minimum post width remains. Posts may also be trimmed to fit into existing 6x post bases at the foundation.
2. Where bottom edge of existing foundation is visible at the pool wing, contractor to provide new footing per attached detail 1.
3. 2x12 redwood joists at 16"oc at North wing stair landing are acceptable alternatives to 2x12 PTDF at 16"oc per plan.
4. Contractor to add U hangers at all North wing stair landing joists.
5. Contractor to add 6x12 PTDF beam below stair stringers at North wing landing per attached detail 2.

It should be noted that this report is based on visual observations made during a site visit conducted in accordance with the National Practice Guidelines for the Structural Engineer of Record and that there is no claim, either stated or implied, that all conditions were observed.

ZFA STRUCTURAL ENGINEERSMarianne Wilson
Engineer**BUILDING PLAN CHECK****★ APPROVED ★**

NOV 06 2008

**PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT**

TITLE / PROJECT NAME

TIMBER COVER INN

SECTION

DATE

10/8/08

ENG / CKR

ZFA/MCW

JOB#

8003.02

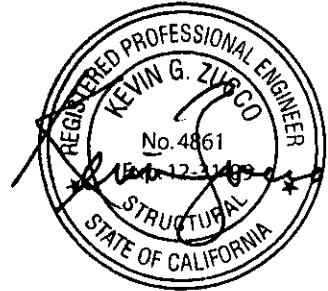
PAGE

1 OF 3



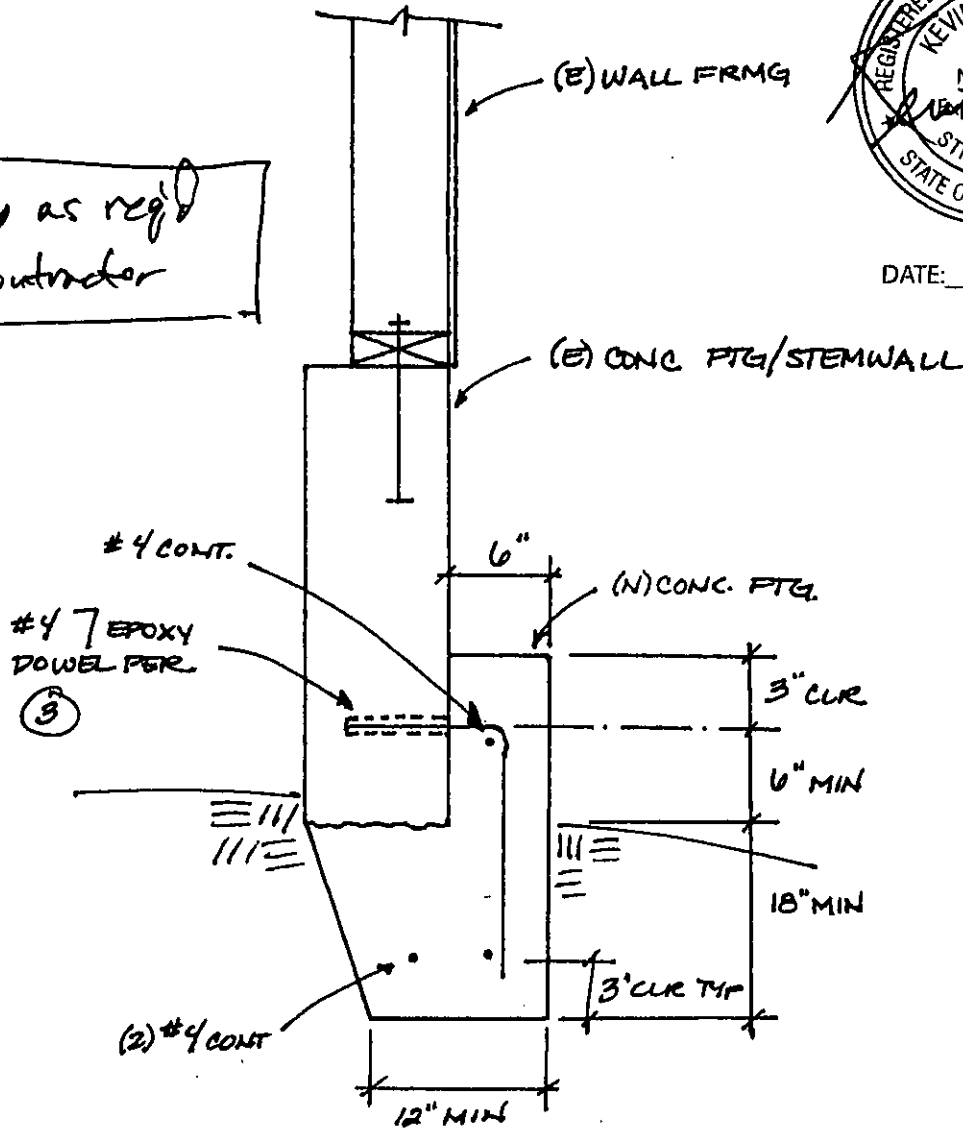
ZFA

STRUCTURAL ENGINEERS

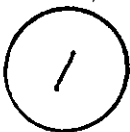


DATE: NOV 04 2008

Shoring as req'd
by Contractor



NOTE: EPOXY (N) BARS INTO
BOULDER AS REQ'D



TITLE / PROJECT NAME

TIMBER COVE INN

DATE

10/8/08

JOB#

800302

SECTION

ENG / CKR

ZFA/MCN

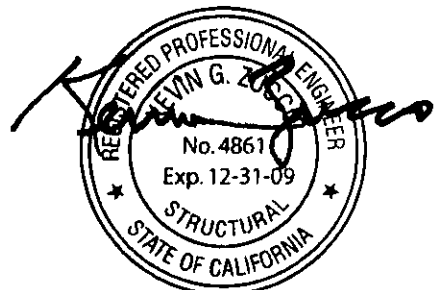
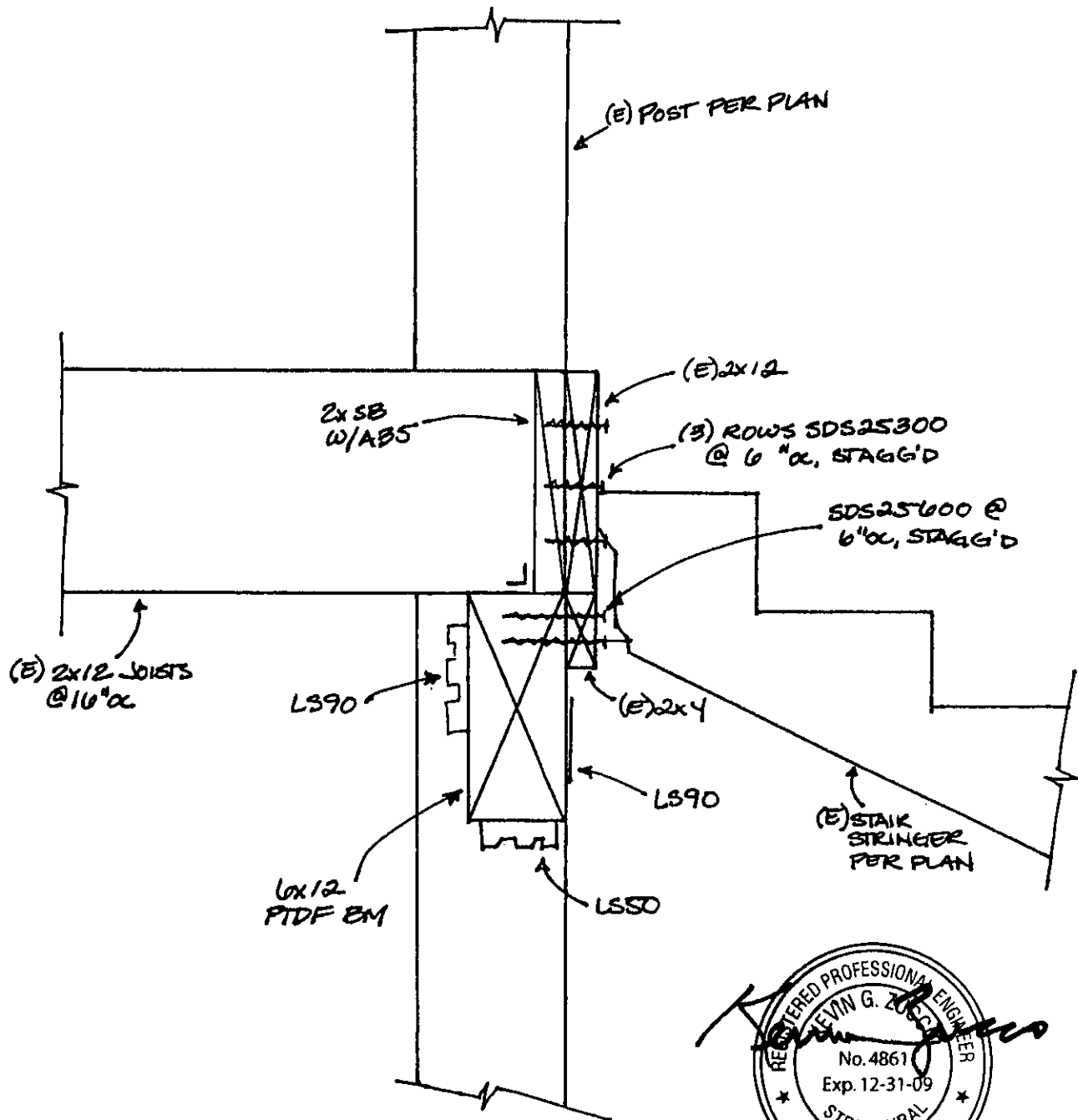
PAGE

2 OF 3



ZFA

STRUCTURAL ENGINEERS



NOV 04 2008

DATE: _____

2

TITLE / PROJECT NAME

TIMBER COVE INN

DATE

10/8/08

JOB#

8003.02

SECTION

ENG / CKR

ZFA/MCW

PAGE

3 OF 3

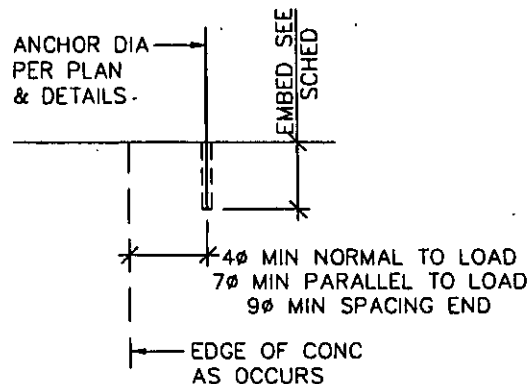


ZFA

STRUCTURAL ENGINEERS

ADHESIVE ANCHORS IN 2500 psi MIN CONCRETE

ANCHOR		MINIMUM EMBEDMENT	ALLOWABLE LOADS#	
THRD ROD	REBAR		SHEAR	TENSION
3/8"Ø	#3	3 1/2"	1085	1970
1/2"Ø	#4	4 1/4"	1930	2839
5/8"Ø	#5	5"	3025	4320
3/4"Ø	#6	6 3/4"	4360	5511
7/8"Ø	#7	7 3/4"	5925	8575
1"Ø	#8	9"	7740	9848



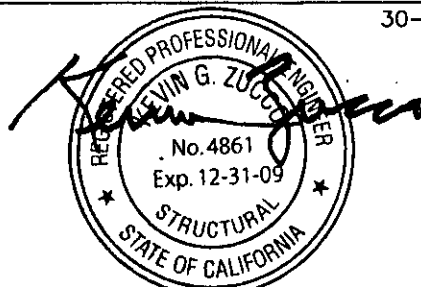
NOTES:

- Install adhesive anchors per manufacturer's, ICBO report and the following instructions.
 - Drill hole 1/8" larger than anchor diameter
 - Thoroughly clean hole with oil free compressed air and a nylon brush as required to remove particulate debris and to achieve a relatively dust free surface on hole sides. Holes are permitted to be damp but all standing water must be removed.
 - Material from the first two trigger pulls must be discarded, to ensure that only properly mixed product is used
 - After the initial amount of epoxy has been discarded, fill the hole 2/3 full with the mixed adhesive.
 - Insert threaded rod or deformed steel reinforcement with a twisting motion to ensure coverage of the threads or bar surface with adhesive. Threaded rods or deformed steel reinforcement dowels must be free of oil, scale and rust.
 - Anchors should not be loaded until the cure time has passed, a minimum of 24 hours.
- When drilling holes in existing concrete, use care and caution to avoid cutting or damaging the existing reinforcing bars. Maintain a minimum clearance of 1" between reinforcement and the drilled-in anchor.
- Acceptable adhesives are: Simpson Set, ICC No. ESR-1772; Hilti HY-150, ICC No. ESR-5193; based on a minimum concrete strength of $F'_c=2500$ psi.
- Threaded rods to A36 or A307 minimum grades.
- Values for shear and tension shown are full maximum values based on 14 diameters edge distance in the direction of load, 5 diameters edge distance normal to load, and 18 diameters spacing each way. Interpolate down for smaller edge distances and spacings per the standard calculation to a minimum of 7 diameters, 4 diameters and 9 diameters respectively.

3

INSPECTED ADHESIVE ANCHOR IN CONCRETE (ICC)

30-01-04



DATE: NOV 04 2008

November 3, 2008

Paul Marquez
SONOMA COUNTY PRMD
2550 Ventura Ave
Santa Rosa, CA 95403

BUILDING PLAN CHECK

★ **APPROVED** ★

NOV 06 2008

**PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT**



ZFA

STRUCTURAL ENGINEERS

RE: TIMBER COVE INN PHASE II – PLAN CHECK RESPONSE
Project No.: 08003.02

Dear Paul:

The following are responses to plan check review comments by Sonoma County PRMD (BLD07-5407) dated October 31, 2008 and received November 3, 2008.

All of the comments that apply to the building structural design by ZFA have been addressed. The plans have been revised to reflect any changes that have occurred. Supporting revised calculations as required are also provided.

An itemized response to each comment follows:

STRUCTURAL COMMENTS:

Sheet S2.1

1. Provide detailed cross section to show attachment to make sliding doors inoperable. Specify fasteners for attachment.
Detail and fasteners have been added to the plan.

Sheet S2.2

2. Provide complete plans for added scope of work for correction notice item #3 and #8, pg 4 of 4. Show enlarged accessible restrooms and room 507.

The new non-bearing walls at the accessible restrooms have been added to 'Access Work' plan on sheet S2.4, and new interior non-bearing wall at room 507 is shown per 'Plan at Level 2' on sheet S2.1 (Previously numbered room 57). Room 507 will be used as a standard guest room, the occupancy will not be changed for use as an office.

Main Office

1212 Fourth Street

Suite Z

Santa Rosa

California 95404

Voice 707.526.0992

Fax 707.526.0217

◆

555 Howard Street

Suite 202

San Francisco

California 94105

Voice 415.243.4091

Fax 415.243.0241

◆

2277 Fair Oaks Boulevard

Suite 320

Sacramento

California 95825

Voice 916.924.7024

Fax 916.924.7034

3. Provide complete plans and details for accessible path of travel from parking to remodeled room 507.
Accessible path of travel is per civil drawings.

Sheet S2.3

4. Provide guardrails at elevated walkway per correction notice.
The detail shows new supports for the interior of a sod roof, not an elevated walkway. There are existing guardrails at the perimeter of the sod roof.

Sheet S2.4

5. Address the issue of the notched beams required to be pressure treated.
A note has been added to the detail to provide additional pressure treating to all cut surfaces.

Sincerely,
ZFA STRUCTURAL ENGINEERS



Marianne Wilson, LEED AP
Engineer