Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

# CITY OF PORTLAND

## BUILDING INSPECTION

## PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 090960

This is to certify that A & D Realty Llc /Norris, Inc.

has permission to Install Fire Alarm

AT 21 Auburn St CBL 375-C001001

**provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.**

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. Bjerwalk. 200

Health Dept.

Appeal Board

Other

Department Name

Director - Building & Inspection Services

9/8/09

**PENALTY FOR REMOVING THIS CARD**

# City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

| Permit No: | Issue Date: | CBL: |
|---|---|---|
| 09-0960 | | 375 C001001 |

| Location of Construction: | Owner Name: | Owner Address: | Phone: |
|---|---|---|---|
| 21 Auburn St | A & D Realty Llc | 5 Militia Dr | |
| **Business Name:** | **Contractor Name:** | **Contractor Address:** | **Phone** |
| | Norris, Inc. | 2257 W Broadway, PO Box 2551 Sout | 2078833473 |
| **Lessee/Buyer's Name** | **Phone:** | **Permit Type:** | **Zone:** |
| | | Fire Alarm System | B-2 |

| Past Use: | Proposed Use: | Permit Fee: | Cost of Work: | CEO District: |
|---|---|---|---|---|
| Commercial | Commercial / Install Fire Alarm | $50.00 | $3,000.00 | 5 |

**FIRE DEPT:** ☒ Approved w/conditions ☐ Denied

9/3/09

Signature: [signature]

**INSPECTION:** Use Group: M Type: Fire Alarm

DBL-2003

Signature: DMB 9/8/09

**Proposed Project Description:**
Install Fire Alarm

**PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)**

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

| Permit Taken By: | Date Applied For: |
|---|---|
| gg | 09/02/2009 |

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

PERMIT ISSUED
SEP - 8 2009
CITY OF PORTLAND

## Zoning Approval

| Special Zone or Reviews | Zoning Appeal | Historic Preservation |
|---|---|---|
| ☐ Shoreland | ☐ Variance | ☒ Not in District or Landmark |
| ☐ Wetland | ☐ Miscellaneous | ☐ Does Not Require Review |
| ☐ Flood Zone | ☐ Conditional Use | ☐ Requires Review |
| ☐ Subdivision | ☐ Interpretation | ☐ Approved |
| ☐ Site Plan w/conditions | ☐ Approved | ☐ Approved w/Conditions |
| Maj ☐ Minor ☐ MM ☐ | ☐ Denied | ☐ Denied |
| Date: DMB 9/8/09 | Date: | Date: |

## CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

# Freedom Fire Protection, Inc.

*Over 30 Years of Fire Protection Experience*
209 Quaker Ridge Rd. Casco, Maine 04015
Phone 207/627-4109 Fax 207/627-7340


September 18, 2009

Portland Fire Department
380 Congress Street
Portland, Maine 04101

Attn: Ben Wallace
Department of Fire Prevention
And Inspections

Ref: North Gate Shopping Plaza
New UPS and vacant tenant space

Sub: Sprinkler Certification for Renovation of sprinkler system for the above referenced project.

This letter is certification that the sprinkler system in the newly renovated UPS tenant space and the vacant tenant space beside it in the North Gate Shopping Plaza, Portland Maine meet the requirements of the National Fire Protection Association 13 standard (NFPA 13). All work performed was off of the existing sprinkler system, and consisted of relocating sprinkler heads to accommodate new construction. The old standard response sprinkler heads were replaced with new quick response type sprinkler heads.

Please call if you need any additional information.

Regards,

Mark Radziszewski

NORRIS INC

Prepared For Tomorrow; Delivered Today

September 16, 2009

TA Napolitano
Tim Napolitano
PO Box 2301
South Portland, ME 04116

Subject: NorthGate Plaza

Dear Tim:

As requested by the Fire Department, I am writing to confirm that the new fire alarm devices for the above mentioned subject were inspected and tested and at the time of inspection the system was found to be fully operational and to the best of our knowledge, met or exceeded all of the requirements as established by the plans and specifications for the project and all applicable codes including NFPA 72.

It was a pleasure working with you on this project. Should you have any questions or need additional information please do not hesitate to contact me.

Sincerely,

Doug Driesen
Operations Manager

NORRIS INC

Prepared For Tomorrow; Delivered Today

**Fax Transmission**

Date: 9/16/09

Company: Napolitano Fax Number: 799-1525

ATTN Napolitano Total Number of Pages: 10
(Including Cover Sheet)

Comments:

From: Doug Driesen

*This facsimile (and any accompanied documentation) is intended only for the use of the individual or entity to which it is addressed and may contain information that is confidential, subject to copyright or constitutes a trade secret. If you are not the intended recipient you are hereby notified that any dissemination, copying or distribution of this message, or files associated with this message, is strictly prohibited. If you have received this message in error, please notify us immediately by faxing this back to us at 207-879-0540 and destroying any copies. Any views or opinions presented are solely those of the author and do not necessarily represent those of the company.*

# FIRE ALARM SYSTEM RECORD OF COMPLETION

*To be completed by the system installation contractor at the time of system acceptance and approval.*

## 1. Protected Property Information

Name of property: Northgate shopping plaza /UPS Store & space to left ****ADD TO EXISTING SYSTEM****

Address: 21 Auburn street Portland Maine 04103

Description of property: Shopping center strip mall

Occupancy type:

Name of property representative:

Address:

Phone: Fax: E-mail:

Authority having jurisdiction over this property: Portland Fire Department

Phone: 874-8676 Fax: E-mail:

## 2. Fire Alarm System Installation, Service, and Testing Information

Installation contractor for this equipment: T.A. Napolitano

Address:

Phone: 799-0538 Fax: E-mail:

Service organization for this equipment: Norris Inc

Address: 2257 West Broadway South Portland Maine 04106

Phone: 1-800-370-3473 Fax: E-mail:

Location of as-built drawings: Location of Historical Test Reports:

Location of system operation and maintenance manuals:

A contract for test and inspection in accordance with NFPA standards is in effect as of 2003

Contracted testing company: Norris Incorporated

Address: 2257 West Broadway South Portland Maine 04106

Phone: 1-800-370-3473 Fax: E-mail:

Contract expires: Contract number: Frequency of routine inspections: Annual

## 3. Type of Fire Alarm System or Service

*NFPA 72®*, Chapter Reference of System Type:

Name of organization receiving alarm signals with phone numbers *(if applicable)*:

Alarm: Portland Fire Department Phone: 874-8676

Supervisory: N/A Phone: N/A

Trouble: N/A Phone: N/A

Entity to which alarms are retransmitted: N/A Phone: N/A

Method of retransmission of alarms to that organization or location: N/A

If Chapter 8, note the means of transmission from the protected premises to the central station:

☐ Digital alarm communicator ☐ McCulloh ☐ Multiplex ☐ 2-way radio ☐ 1-way radio ☒ N/A

If Chapter 9, note the type of connection: ☒ Local energy ☐ Shunt ☐ N/A

**3.1 System Software**

Operating system (executive) software revision level:

Site-specific software revision date: Revision completed by:

## 4. Signaling Line Circuits

*Characteristics of signaling line circuits connected to this system (see NFPA 72®, Table 6.6.1):*

Quantity: N/A Style: N/A Class: N/A

## 5 Alarm-Initiating Devices and Circuits

*Characteristics of initiating device circuits connected to this system (see NFPA 72®, Table 6.5):*

Quantity: 1 Style: 4 Class: b

**5.1 Manual Initiating Devices**

**5.1.1 Manual Pull Stations** Number of manual pull stations: 2

Type of devices: ☐ Addressable ☒ Conventional ☐ Coded ☐ Transmitter ☐ N/A

**5.2 Automatic Initiating Devices**

**5.2.1 Area Smoke Detectors** Number of smoke detectors: 0

Type of coverage: ☐ Complete area ☐ Partial area ☐ Nonrequired partial area ☒ N/A

Type of devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

Type of smoke detector sensing technology: ☐ Ionization ☐ Photoelectric

**5.2.2 Duct Smoke Detectors** Number of duct smoke detectors: 0

Type of coverage: N/A

Type of devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

Type of smoke detector sensing technology: ☐ Ionization ☐ Photoelectric

**5.2.3 Heat Detectors** Number of heat detectors: 0

Type of coverage: ☐ Complete area ☐ Partial area ☐ Nonrequired partial area ☒ N/A

Type of devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

**5.2.4 Sprinkler Waterflow Detectors** Number of waterflow detectors: 0

Type of devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

**5.2.5 Alarm Verification** Number of devices subject to alarm verification: N/A

Alarm verification on this system is: ☐ Enabled ☐ Disabled ☐ Set for seconds

## 6. Supervisory Signal-Initiating Devices and Circuits

**6.1 Sprinkler System** Number of valve supervisory switches: 0

Type of devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

6.2 Fire Pump

Type of fire pump: ☐ Electric ☐ Diesel

Type of fire pump supervisory devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

Fire Pump Functions Supervised

☐ Fire pump power ☐ Fire pump running ☐ Fire pump phase reversal ☐ Selector switch not in auto

☐ Engine or control panel trouble ☐ Low fuel

Other:

6.3 Engine-Driven Generator

Type of generator supervisory devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A

☐ Engine or control panel trouble ☐ Generator running ☐ Selector switch not in auto ☐ Low fuel

Other: N/A

## 7. Annunciators

7.1 Annunciator 1 ☐ Local ☐ Remote

Type: ☐ Addressable ☐ Directory ☐ Graphic ☒ N/A Location:

7.2 Annunciator 2 ☐ Local ☐ Remote

Type: ☐ Addressable ☐ Directory ☐ Graphic ☒ N/A Location:

7.3 Annunciator 3 ☐ Local ☐ Remote

Type: ☐ Addressable ☐ Directory ☐ Graphic ☒ N/A Location:

## 8. Alarm Notification Devices and Circuits

8.1 Emergency Voice Alarm Service

Number of single voice alarm channels: 0 Number of multiple voice alarm channels: 0

Number of speakers: 0 Number of speaker zones: 0

8.2 Telephone Jacks

Number of telephone jacks installed: 0 Number of telephone handsets stored on site: 0

Type of telephone system installed: ☐ Electrically powered ☐ Sound powered ☒ N/A

8.3 Nonvoice Audible System

*Characteristics of notification device circuits connected to this system (see NFPA 72®, Table 6.5):*

Quantity: 0 Style: N/A Class: N/A

8.4 Types and Quantities of Nonvoice Notification Appliances Installed

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bells: | 0 | With visual device: | 0 | Horns: | 5 | With visual device: | 5 |
| Chimes: | 0 | With visual device: | 0 | Bells: | 0 | With visual device: | 0 |

Visual devices without audible devices: 2 Other (describe): 0

## 9. Emergency Control Functions Activated

☐ Hold-open door releasing devices ☐ Smoke management or smoke control
☐ Door unlocking ☐ Elevator recall ☐ Other

## 10. System Power Supply

### 10.1 Primary Power

Nominal voltage: 120 VAC Amps:
Overcurrent protection: Type: Breaker Amps:
Location (of primary supply panelboard): Main Electrical Room By FACP
Disconnecting means location:

### 10.2 Secondary Power

Location: Main Panel Type: Battery Nominal voltage: 24vdc Current rating:
Number of standby batteries: 2 Amp hour rating: 2(12ah)
Location of emergency generator: NA
Location of fuel storage: NA
Calculated capacity of secondary power to drive the system
In standby mode: 60hrs In alarm mode:

## 11. Record of System Installation

*Fill out after all installation is complete and wiring has been checked for opens, shorts, ground faults, and improper branching, but before conducting operational acceptance tests.*

The system has been installed in accordance with the following NFPA standards: (Note any or all that apply.)

☐ *NFPA 72*® ☐ *NFPA 70*®, Article 760
☒ Manufacturer's published instructions ☐ Other (please specify):

System deviations from referenced NFPA standards:

Signed: Signed Original Printed name: Scott Machwinnia Date: 9-14-09
Organization: T.A. Napolitano Title: Master Electrician Phone: 799-0538

## 12. Record of System Operation

All operational features and functions of this system were tested by or in the presence of the signer shown below, on the date shown below, and were found to be operating properly in accordance with the requirements of:

☐ *NFPA 72*® ☐ *NFPA 70*®, Article 760
☒ Manufacturer's published instructions ☐ Other (please specify):

☐ Documentation in accordance with Inspection and Testing Form (Figure 10.6.2.3 of *NFPA 72*®) is attached

Signed: Printed name: Craig Elkanich Date: 9-14-09
Organization: Norris Inc Title: Operations Tech Phone: 1-800-370-3473

## 13. Certifications and Approvals

### 13.1 System Installation Contractor

This system as specified herein has been installed and tested according to all NFPA standards cited herein.

Signed: Signed Original Printed name: Scott Meewhinnie Date: 9-14-09

Organization: T.A. Napolitano Title: Master Electrician Phone: 799-0538

### 13.2 System Service Contractor

This system as specified herein has been installed and tested according to all NFPA standards cited herein.

Signed: Printed name: Craig Elkanich Date: 9-14-09

Organization: Norris Inc Title: Operations Tech Phone: 1-800-370-3473

### 13.3 Central Station

This system as specified herein will be monitored according to all NFPA standards cited herein.

Signed: N/A Printed name: Date:

Organization: Title: Phone:

### 13.4 Property Representative

I accept this system as having been installed and tested to its specifications and all NFPA standards cited herein.

Signed: Printed name: Date:

Organization: Title: Phone:

### 13.5 Authority Having Jurisdiction

I have witnessed a satisfactory acceptance test of this system and find it to be installed and operating properly in accordance with its approved plans and specifications, its approved sequence of operations, and with all NFPA standards cited herein.

Signed: Printed name: Portland Fire Department Date:

Organization: Title: Phone:

NORRIS INC

## INSPECTION AND TESTING FORM

****** ADD TO EXISTING SYSTEM******

**Building Name**

Name: Northgate Plaza
Address: 21 Auburn Street Portland
Building Contact:
Telephone:

**Property Owner**

Name:
Address:
Owner Contact:
Telephone:

**Monitoring Entity**

Name: Local Fire Department
Contact: Dispatch
Telephone: 874-8576
Account No.:

**Approving Agency**

Name: Portland Fire Department
Contact: Dispatch
Telephone: 874-8576

**Type of Transmission:**

Master Box

**Service:**

Annually

**Panel:**

Control Unit Manufacturer: Notifier

Model: System 500

**Circuit Styles:**

### ALARM INTIATING DEVICES

| Device Type | Quantity | Notes |
|---|---|---|
| Manual Stations | 2 | |
| Ion Detectors | | |
| Photo Detectors | | |
| Duct Detectors | | |
| Heat Detectors | | |
| Waterflow Switches | | |
| Supervisory Switches | | |
| Low Air | | |
| Other (Specify) | | |

### ALARM NOTIFICATION APPLIANCES

| Device Type | Quantity | Notes |
|---|---|---|
| Horn/Strobes | 5 | |
| Strobes | 2 | |
| Horns | | |
| Chimes | | |
| Speaker/Strobes | | |
| Mini Horn | | |
| Other (Specify) | | |

Are circuits Supervised? ☑ Yes ☐ No

| NOTIFICATIONS ARE MADE: | | | WHO | TIME |
|---|---|---|---|---|
| Monitoring Entity | ☐ Yes | ☐ No | | |
| Building Management | ☐ Yes | ☐ No | | |
| Building Occupants | ☐ Yes | ☐ No | | |

| TYPE | VISUAL | FUNCTIONAL | COMMENTS |
|---|---|---|---|
| Control Unit | ☐ Pass | ☐ Pass | |
| Interface Equipment | ☐ Pass | ☐ Pass | |
| Lamps/ LED's | ☐ Pass | ☐ Pass | |
| Fuses | ☐ Pass | ☐ Pass | |
| Trouble Signals | ☐ Pass | ☐ Pass | |
| Disconnect Switches | ☐ Pass | ☐ Pass | |
| Ground Fault Monitoring | ☐ Pass | ☐ Pass | |

| SECONDARY POWER | VISUAL | FUNCTIONAL | COMMENTS |
|---|---|---|---|
| Battery Condition | ☐ Pass | ☐ Pass | |
| Load Voltage | ☐ Pass | ☐ Pass | |
| Amperes | ☐ Pass | ☐ Pass | |

| REMOTE ANNUNCIATOR | ☐ Pass | ☐ Pass | |
|---|---|---|---|

| NOTIFICATION APPLIANCES | | | |
|---|---|---|---|
| Audible | ☑ Pass | ☑ Pass | |
| Visual | ☑ Pass | ☑ Pass | |

| EMERGENCY COMMUNICATION EQUIPMENT | VISUAL | FUNCTIONAL | COMMENTS |
|---|---|---|---|
| Phone Set | ☐ Pass | ☐ Pass | |
| Phone Jacks | ☐ Pass | ☐ Pass | |
| Off-Hook Indicator | ☐ Pass | ☐ Pass | |
| Amplifier(s) | ☐ Pass | ☐ Pass | |
| Tone Generator(s) | ☐ Pass | ☐ Pass | |
| Call In Signal | ☐ Pass | ☐ Pass | |
| System Performance | ☐ Pass | ☐ Pass | |

| ON/OFF PREMISES MONITORING | | | TIME |
|---|---|---|---|
| Alarm Signal | ☐ Yes | ☐ No | |
| Alarm Restoral | ☐ Yes | ☐ No | |
| Trouble Signal | ☐ Yes | ☐ No | |
| Trouble Restoral | ☐ Yes | ☐ No | |
| Supervisory Signal | ☐ Yes | ☐ No | |
| Supervisory Restoral | ☐ Yes | ☐ No | |
| | ☐ Yes | ☐ No | |

| NOTIFICATION OF COMPLETION: | | | WHO | TIME |
|---|---|---|---|---|
| Monitoring Entity | ☐ Yes | ☐ No | | |
| Building Management | ☐ Yes | ☐ No | | |
| Building Occupants | ☐ Yes | ☐ No | | |

| LOCATION | DEVICE TYPE | NOTES | PASS | FAIL |
|---|---|---|---|---|
| UPS Space front | ps | | ☑ | ☐ |
| Left hand Space | ps | | ☑ | ☐ |
| UPS space | hs | | ☑ | ☐ |
| UPS space | hs | | ☑ | ☐ |
| UPS space bathroom | st | | ☑ | ☐ |
| ups space rear | hs | | ☑ | ☐ |
| Left hand space | hs | | ☑ | ☐ |
| Left hand space | hs | | ☑ | ☐ |
| Left hand space | st | | ☑ | ☐ |

THE FOLLOWING DID NOT OPERATE CORRECTLY:

All tested systems were normal at this time.

Unable to test A\V's at this time due to business hours,

SYSTEM RESTORED TO NORMAL OPERATION: DATE: 9/14/09 TIME: _____

**THIS TESTING WAS PERFORMED IN ACCORDANCE WITH APPLICABLE NFPA STANDARDS.**

NAME OF INSPECTOR: Craig Elkanich

INSPECTOR SIGNATURE: _____

CUSTOMER SIGNATURE: _____

## City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

| Permit No: | Date Applied For: | CBL: |
|---|---|---|
| 09-0960 | 09/02/2009 | 375 C001001 |

| Location of Construction: | Owner Name: | Owner Address: | Phone: |
|---|---|---|---|
| 21 Auburn St | A & D Realty Llc | 5 Militia Dr | |
| **Business Name:** | **Contractor Name:** | **Contractor Address:** | **Phone** |
| | Norris, Inc. | 2257 W Broadway, PO Box 2551 Sout | (207) 883-3473 |
| **Lessee/Buyer's Name** | **Phone:** | **Permit Type:** | |
| | | Fire Alarm System | |

| Proposed Use: | Proposed Project Description: |
|---|---|
| Commercial / Install Fire Alarm | Install Fire Alarm |

**Dept:** Zoning **Status:** Approved with Conditions **Reviewer:** Jeanine Bourke **Approval Date:** 09/08/2009

**Note:**

**Ok to Issue:** ☑

1) The use of the space is retail/mercantile, separate permit and approval is required for a change of occupancy.
2) Separate permits shall be required for any new signage.

**Dept:** Building **Status:** Approved with Conditions **Reviewer:** Jeanine Bourke **Approval Date:** 09/08/2009

**Note:**

**Ok to Issue:** ☑

1) Fire Alarm systems shall be installed per Sec. 907 of the IBC 2003
2) Equipment must be installed in compliance per the manufacturer's specifications
3) Separate permits are required for any electrical, plumbing, sprinkler, fire alarm or HVAC or exhaust systems. Separate plans may need to be submitted for approval as a part of this process.

**Dept:** Fire **Status:** Approved with Conditions **Reviewer:** Ben Wallace Jr. **Approval Date:** 09/03/2009

**Note:** Renovation of an existing fire alarm system

**Ok to Issue:** ☑

1) Notification appliances shall comply with NFPA 72-7.
2) This permit is for a renovation of an existing building fire alarm system in 2 individual tenant spaces. All devices shall be cross-listed for use with the system. Existing components have not been reviewed for code compliance.
3) Fire alarm system requires a Masterbox connection per city ordinance.
4) Sprinkler system shall be supervised.
5) The Fire alarm systems shall be reviewed by a licensed contractor[s] for code compliance. Compliance letters are required.
6) The fire alarm system shall comply with NFPA 72 and Fire Department Technical Standard. A compliance letter is required.
7) Fire Alarm system shall be maintained.
   If system is to be off line over 4 hours a fire watch shall be in place.
   Dispatch notification required 874-8576.

T.A. NAPOLITANO, INC.
Electrical Contractor
*Commercial • Residental*
*Bucket Truck*

207/799-0538 FAX 207/799-1525

Timothy A. Napolitano

Email: Tanelec@maine.rr.com
P.O. Box 2301, South Portland, ME 04116-2301

## MIT INSPECTION PROCEDURES

**74-8703 or 874-8693 (ONLY )**

**our inspections as agreed upon**

**f the project is not started or ceases for 6 months.**

ed to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

**By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.**

**A Pre-construction Meeting will take place upon receipt of your building permit.**

**__X__ Final inspection required at completion of work.**

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

**If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.**

**CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.**

T.A. Napolitano — 9/8/09

Signature of Applicant/Designee — Date

— 9/8/09

Signature of Inspections Official — Date

**CBL:** 375 C001001 **Building Permit #:** 09-0960

# Fire Alarm Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted

Installation address: Northgate Shopping CBL: 375 C001

Exact location: (within structure) _____

Type of occupancy(s) (NFPA & ICC): NFPA - Retail

Building owner: _____

System Designer: _____

Designer phone: _____ E-mail: _____

Installing contractor: T.A. Napolitano License No: T765

Contractor phone: 799-0538/831-1031 E-mail: TNAPElec@Maine.RR.Com

This is a new application: YES ☑ NO ☐

This is an amendment to an existing permit: YES ☐ NO ☑ Permit no: _____

**The following documents have been provided with this application:**

| | | |
|---|---|---|
| Floor plans: | YES ☐ | NO ☐ |
| Wiring diagram: | YES ☑ | NO ☐ |
| Annunciator details: | YES ☐ | NO ☑ |
| Bid specifications: | YES ☐ | NO ☑ |
| Equipment data sheets: | YES ☑ | NO ☐ |
| Battery & voltage drop calculations: | YES ☐ | NO ☑ |
| Sequence of operations: | YES ☐ | NO ☑ |
| Designer/ personnel qualifications: | YES ☐ | NO ☑ |

COST OF WORK: 3,000.00

PERMIT FEE: _____

($10 PER $1,000 + $30 FOR THE FIR[illegible] $1,000)

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
SEP - 2 2009
RECEIVED

**Please submit all of the information outlined on the checklist to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.**

Prior to acceptance of any fire alarm system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with NFPA 70, NFPA 72, and Fire Department Technical Standard(s).

Applicant signature: _____ Date: _____

Norris Inc
2257 West Broadway
South Portland, ME 04106
1-800-370-3473

305754SP
Packing List
08/21/2009 Page 1 Time 2:29 PM
Purchase Order #: SCOTT

1.5% 10 Net :

NAPOLI 207-799-0538 Fax: 207-799-1525 List PDR 08/21/2009 PC A

S NAPOLITANO T A
O TIM NAPOLITANO
L PO BOX 2301
D S. PORTLAND, ME 04116-

S TA NAPOLITANO
H
I
P 968 BROADWAY
S PORTLAND, ME 04106

DSG

Project Title: Northgate

| Qt | Ship Qty | Back Qty | Description | Location |
|---|---|---|---|---|
| 2 | 2 | | NOT-NBG-12L,Dual action lexan station, red, Notifier Key lock. | 10-3 |
| 5 | 5 | | NOT-NS-24MCW-FR,HORN/STRB,S2,24VDC,SEL,W/R | 17-4 |
| 2 | 2 | | Notifier-RSS-24MCW-FR,STRB 24V,15/30/75/110 CNDL RED | 16-5 |

Any claims for Shortages or Damages must be filed within 7 days or
Norris Inc will not be held responsible. Date: _____ Signature: _____

| Date | ShipVia | Cartons | Weight | Packer | Bill of Lading # | Freight Amount |
|---|---|---|---|---|---|---|
| 08/21/2009 | | | | BLR | | |

NOTIFIER®

March 30, 2004 DN-5765 • J-120

# Wheelock RSS and RSSP Series Single- and Multi-Candela Strobes and Strobe Plates

Section: Audio/Visual Devices

## GENERAL

Wheelock's patented Series RSS Strobe Appliances and Series RSSP Strobe Plates have lower current draw while maintaining outstanding performance, reliability and cost effectiveness. These versatile appliances will satisfy virtually all requirements for indoor, wall or ceiling mount applications.

Strobe options for wall mount models include 15/75 or Wheelock's Patented MCW multi-candela strobe with field selectable candela settings of 15/30/75/110cd, Ceiling mount models include the patented MCC multi-candela ceiling strobe with field selectable intensities of 15/30/75/95cd or the high intensity MCCH strobe with field selectable 115/177cd.

All models may be synchronized when used in conjunction with the Wheelock **SM**, **DSM** Sync Modules or a Power Supplies with Wheelock's Patented Sync Protocol. Synchronized strobes can eliminate possible restrictions on the number of strobes in the field of view. Wheelock's synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy as well as meeting the requirements of NFPA 72.

Wheelock's Series RSS Strobes employ a Patented Integral Strobe Mounting Plate that can be mounted to a single gang, double gang, 4" square, 100mm European backboxes or the SHBB surface backbox. If the flush backbox has side or top space between it and the finished wall, the **NATP** (Notification Appliance Trimplate) may be used. It provides an additional .65" of trim for the Appliance. An attractive cover plate is provided for a clean, finished appearance on all models.

The Series RSSP Multi-Candela Strobe Plates are a cost effective way to retrofit required wall strobe appliances to bells, horns, chimes, multitones or speakers and easily mounts to standard 4" backboxes or for surface mount use with Wheelock's SBL2 surface backbox.

## FEATURES

- Wall mount Multi-Candela models are available with Field Selectable Candela Settings of 15/30/ 75/110cd or 135/185cd. Single Candela models are available in 15/75cd
- Ceiling mount Multi-Candela models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd.
- Strobes produce 1 flash per second over the regulated voltage range
- 12 and 24 VDC models with wide UL "Regulated Voltage" using filtered (DC) or unfiltered VRMS input voltage
- Synchronize with Wheelock SM, DSM or Power Supplies with built-in sync protocol

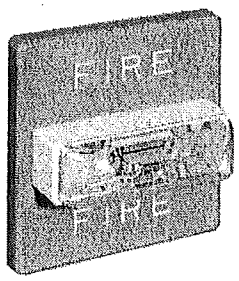
UL LISTED S5391

ULC CS 356

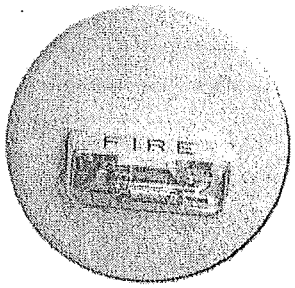
California State Fire Marshal 7125-0785:141

MEA 151-92-E Vol. XIX, XX Vol. XXIV *(RSS-24MCW-FR, -FW)*

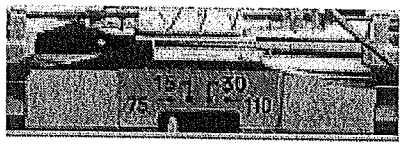
FM APPROVED



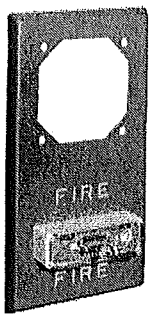

Series RSS




RSS Round




**Multi-Candela Indicator**
**(bottom of Strobe Lens)**




Series RSSP

- ADA/NFPA/UFC/ANSI compliant. Meets OSHA 29 Part 1910.165

## GENERAL NOTES

- RSS/RSSP Series strobe products are listed under UL 1971 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- ***"Regulated voltage range"*** *is the newest terminology used by UL to identify the voltage range. Prior to this change, UL used the terminology "Listed voltage range."*

**⚠WARNING!**

PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THE FOLLOWING INSTRUCTIONS, CAUTIONS AND 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.

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

## MODEL NUMBERS OFFERED BY NOTIFIER

| MODEL | WALL/ CEILING MOUNT | NON-SYNC | SYNC W/ SM, DSM | STROBE CANDELA | 12/24 VDC | # MODEL COLOR RED/WHITE | MOUNTING OPTIONS *** | SQUARE OR ROUND | AGENCY APPROVALS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | UL | MEA | CSFM | FM | BFP |
| RSS-24MCW-FR | Wall | X | X | 15/30/75/110 | 24 | Red | B,D,E,F,G,H,J,N,O,R,X | Square | X | X | X | X | X |
| RSS-24MCW-FW | Wall | X | X | 15/30/75/110 | 24 | White | B,D,E,F,G,H,J,N,O,R,X | Square | X | X | X | X | X |
| RSS-24 1575W-FR | Wall | X | X | 15 (75 on Axis) | 24 | Red | B,D,E,F,G,H,J,N,O,R,X | Square | X | X | X | X | X |
| RSS-12 1575W-FR | Wall | X | X | 15 (75 on Axis) | 12 | Red | B,D,E,F,G,H,J,N,O,R,X | Square | X | X | X | X | X |
| RSS-24MCC-FR | Ceiling | X | X | 15/30/75/95 | 24 | Red | B,D,E,F,G,H,J,N,O,R,X | Square | X | * | X | * | * |
| RSS-24MCC-FW | Ceiling | X | X | 15/30/75/95 | 24 | White | B,D,E,F,G,H,J,N,O,R,X | Square | X | * | X | * | * |
| RSS-24MCCR-FW | Ceiling | X | X | 15/30/75/95 | 24 | White | B,D,E,F,G,H,J,N,O,R,X | Round | X | * | X | * | * |
| RSS-24MCCH-FW | Ceiling | X | X | 115/177 | 24 | White | B,D,E,F,G,H,J,N,O,R,X | Square | X | * | * | * | * |
| RSS-24MCCH-FR | Ceiling | X | X | 115/177 | 24 | Red | B,D,E,F,G,H,J,N,O,R,X | Square | X | * | * | * | * |
| RSS-24MCCHR-FW | Ceiling | X | X | 115/177 | 24 | White | B,D,E,F,G,H,J,N,O,R,X | Round | X | * | * | * | * |
| RSSWP-2475W-FR* | Wall | X | X | 75 @ -31°F | 24 | Red | B,D,E,F,G,H,J,N,O,R,X | Square | X | X | X | X | * |

***Refer to Notifier data sheet DN-6111 for mounting options.

Table 1: Average RMS Current*

| RSS/RSSP 24VDC Models | RSS/RSS - Wall Mount | | | | | RSS - Ceiling Mounth | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 241575W | 24MCW | | | | 24MCC | | | | 24MCCH | |
| | 1575cd | 15cd | 30cd | 75cd | 110cd | 15cd | 30cd | 75cd | 95cd | 115cd | 177cd |
| 16 vdc | 0.101 | 0.062 | 0.102 | 0.192 | 0.265 | 0.068 | 0.112 | 0.211 | 0.292 | 0.300 | 0.420 |
| **24 vdc** | **0.064** | **0.41** | **0.065** | **0.116** | **0.155** | **0.045** | **0.072** | **0.128** | **0.171** | **0.195** | **0.270** |
| 33 vdc | 0.047 | 0.032 | 0.047 | 0.081 | 0.107 | 0.035 | 0.052 | 0.089 | 0.118 | 0.145 | 0.190 |

| RSS/RSSP 24 VDC Models | RSS/RSSP Wall Mount |
|---|---|
| | 121575W |
| 8 vdc | 0.336 |
| **12 vdc** | **0.179** |
| 17.5 vdc | 0.136 |

*Average RMS Current is per UL average RMS method and Average Mean Current is per UL average mean method. 12 volt models use average mean current.

For rated In Rush and Peak current across the UL listed voltage range for both filtered DC and unfiltered VRMS (FWR), see installation instructions.

| SYNC MODULES/POWER SUPPLY | | | | |
|---|---|---|---|---|
| MODEL NUMBER | ORDER CODE | INPUT VOLTAGE (VDC) | AVERAGE MEAN CURRENT @ 24 VDC | MOUNTING OPTIONS |
| SM-12/24-R | 6369 | 24 | .028 | W |
| DSM-12/24-R | 6374 | 24 | .035 | W |

NOTES:
SM Sync Module is rated for 3.0 amperes @ 24 VDC.
DSM Sync Module is rated for 3.0 amperes per circuit. The maximum number of interconnected DSM modules is twenty (20).

| Table 2: Audibles/Speakers for RSSP Strobe Plate | |
|---|---|
| **Product** | **Series** |
| Multitone Appliances | AMT, MT |
| Horns | AH, NH, HS |
| Motor Bells | MB-G6/G10 |
| Speakers | ET-1010/1080, E70, ET70 |
| Chimes | CH70 |

## WIRING DIAGRAMS

*FIGURE 1:* **RSS/RSSP device.**

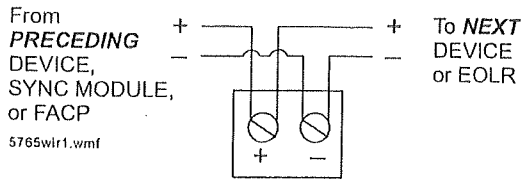



*FIGURE 2:* **Strobe/plate assembly with audible and visible operating in unison.**

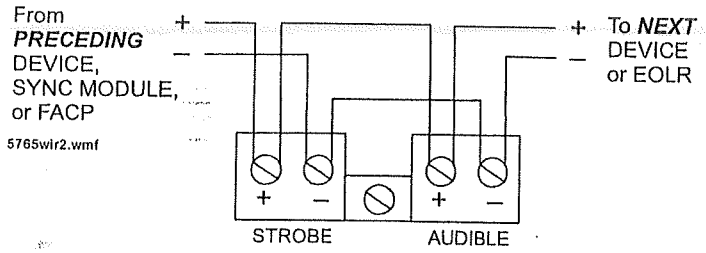



*FIGURE 3:* **Strobe/plate assembly with audible and visible operating independently.**

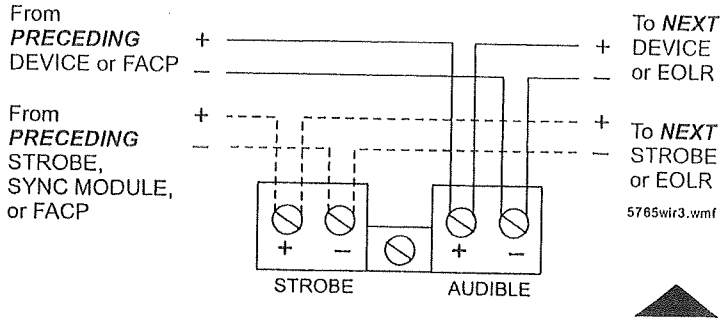
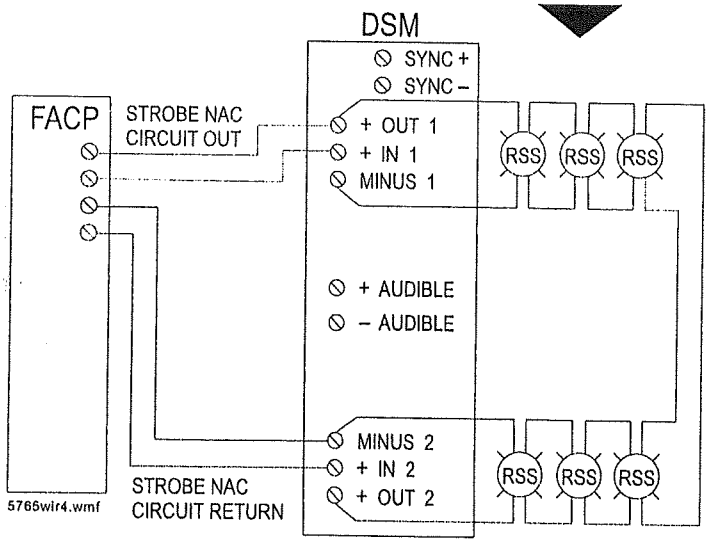



*FIGURE 4:* **RSS/RSSP devices synchronized with DSM Module; single Class "A" NAC circuit.**




*For details on using SM or DSM Sync Modules Installation instructions #P83123 (for SM) or #P83177 (for DSM).*

*FIGURE 5:* **RSS/RSSP devices synchronized with SM Module single Class "B" NAC circuit.**

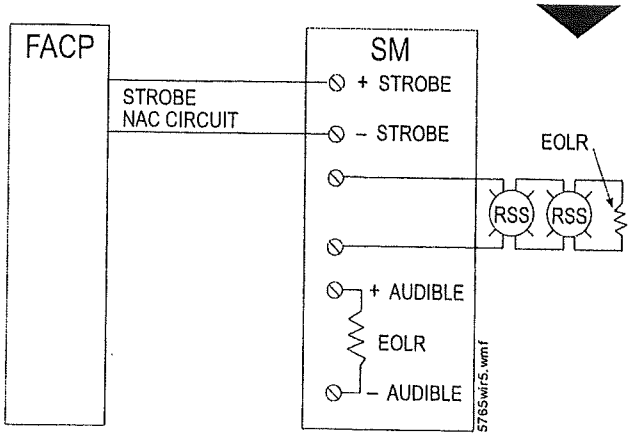
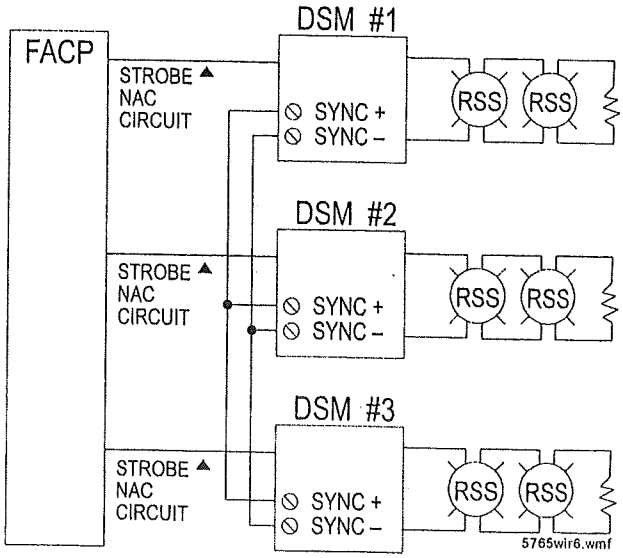



*FIGURE 6:* **RSS/RSSP devices synchronized with multiple DSM Modules.**

**INTERCONNECTING WIRING SHOWN. MAXIMUM OF TWENTY (20) DSM MODULES.**



**⚠WARNING!** CONTACT WHEELOCK FOR THE CURRENT "INSTALLATION INSTRUCTIONS" AND "GENERAL INFORMATION" SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THESE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

- TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.
- FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.
- ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELA SETTINGS WILL AFFECT CURRENT DRAW. RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCE OR FUSES.
- COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.
- THE VOLTAGE APPLIED TO THESE PRODUCTS MUST BE WITHIN THEIR "REGULATED VOLTAGE RANGE".
- INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.
- INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.
- USE STROBES ONLY ON CIRCUITS WITH CONTINUOUSLY APPLIED OPERATING VOLTAGE. DO NOT USE STROBES ON CODED OR
  INTERRUPTED CIRCUITS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF AS THE STROBES MAY NOT FLASH.
- FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER
  INSTALLATION, APPLICATION, 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.
- CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.

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Wheelock products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

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## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The visual notification appliances shall be Wheelock Series RSS Strobe Appliances or approved equals. The Series RSS shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The strobe shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. The 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. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP). When Strobe Plates are to be installed, they shall be the Wheelock Series RSSP Strobe Plate and shall have the same electronic circuitry as the Wheelock Series RSS.

The Series RSS Strobe shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 at 15/30/75/110cd or 135/185cd for wall mount and 15/30/75/95cd or 115/177cd for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 1575 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on axis is required (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with Wheelock's SM, DSM Sync Modules or a Power Supply with built-in Patented Wheelock Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync module or Power Supply fails to operate, (i.e., contacts remain closed), the strobe shall revert to a non-synchronized flash rate. The strobes shall be designed for indoor surface of flush mounting.

The Series RSS Strobe Appliances shall incorporate a Patented, Integral Strobe Mounting Plate that shall allow mounting to single-gang, double-gang, 4-inch square, 100mm European type backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided. An attaching cover plate shall be provided to give the Appliance and attractive appearance. The Appliance shall not have any mounting holes or screw heads visible when the installation is completed.

The Series RSSP Multi-Candela or single candela Strobe Plate shall mount to either a standard 4 inch square backbox for flush mounting, or the Wheelock SBL2 backbox for surface mounting.

All notification appliances shall be backward compatible.NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Wheelock, Inc. standard terms and conditions.

NOTIFIER®

March 30, 2004 DN-6601 • J-134

# Wheelock NS Series horn Strobes and NH Series Horns

Section: Audio/Visual Devices

## GENERAL

The Wheelock Series NS Horn Strobe Appliances will satisfy virtually all requirements for indoor, wall mount applications.

The Series NH Horn and the horn portion of the Series NS include a selectable continuous horn tone or temporal pattern (Code 3) with selectable dBA settings of 90 or 95 dBA.

Strobe options include 1575cd or Wheelock's patented Multi-Candela strobe with field selectable candela settings of 15/30/75/110cd.

These versatile Horn Strobe Appliances may be synchronized when used in conjunction with the Wheelock SM or DSM Sync Modules or a Power Supply with the Wheelock patented Sync Protocol. Additionally, the audible may be silenced while maintaining strobe activation.

All models of the Series NS and NH are designed for maximum performance, reliability and cost-effectiveness while meeting or exceeding the latest requirements of NFPA 72/ANSI 117.1/UFC and UL Standards 1971 and 464 as well as meeting ADA requirements concerning photosensitive epilepsy.

UL LISTED E 5946

ULC CS 243 CS 356

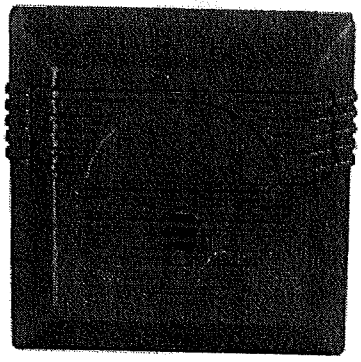
FM APPROVED

California State Fire Marshal 7125-0785:142

MEA 151-92-E

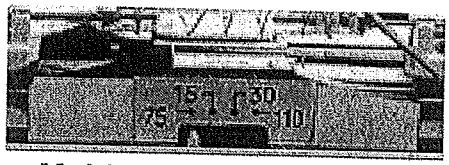

NS Horn Strobe

NH Horn



## FEATURES

- Field Selectable Candela Settings 15/30/75/110cd (24 VDC Multi-Candela models) or 1575cd in 12 or 24 VDC
- Selectable Continuous Horn or Temporal (Code 3)
- 2 Selectable dBA settings of 90 and 95 dBA in both tones
- 12 and 24 VDC models with UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Patented Universal Mounting Plate
- Wall Mount
- ADA/NFPA/UFC/ANSI compliant
- Complies with OSHA 29, Part 1910.165
- NH horn is selectable 12 or 24 VDC in 1 unit
- Synchronize with Wheelock SM or DSM Sync Module or the Power Supply with built-in sync protocol
- Patent pending Universal Mounting Plate for single-gang, double-gang, 4" (10.16 cm) square, or 100 mm European backboxes, or Wheelock's SHBB shallow surface backbox.
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires




**Multi-Candela Indicator**
**(bottom of Strobe Lens)**

## 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 Standard 1971.
- Series NS Strobe products are listed under UL Standard 1971 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- Series NH horns are listed under UL Standard 464 for audible signal appliances (Indoor use only).
- **"Regulated Voltage Range" is the newest terminology used by UL to identify the voltage range. Prior to this change UL used the terminology "Listed Voltage Range".**

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. 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.**

**Table 1: Ratings Per UL Standard 1971**

| Model | Input Voltage VDC | Regulated Voltage Range VDC/FWR | Strobe Candela (CD) |
|---|---|---|---|
| NS-24MCW | 24 | 16.0 - 33.0 | 15/30/75/110 |
| NS-241575W | 24 | 16.0 - 33.0 | 15 (75 on Axis) |
| NS-121575W | 12 | 8.0 - 17.5 | 15 (75 on Axl) |

**Table 2: *Average RMS Current Ratings**

| Voltage | 15cd | 30cd | 75cd | 110cd |
|---|---|---|---|---|
| **NS-24MCW with High (95 dBA) Setting** | | | | |
| 16.0 VDC | .077 | .113 | .195 | .268 |
| 24.0 VDC | .065 | .087 | .134 | .174 |
| 33.0 VDC | .069 | .082 | .117 | .134 |
| **NS-24MCW with Low (90 dBA) Setting** | | | | |
| 16.0 VDC | .070 | .106 | .188 | .261 |
| 24.0 VDC | .052 | .072 | .126 | .158 |
| 33.0 VDC | .045 | .060 | .097 | .114 |

**Table 3: *Average RMS Current Ratings**

| Voltage | High (95) dBA | Low (90) dBA |
|---|---|---|
| **NS-241575W** | | |
| 16.0 VDC | .120 | .116 |
| 24.0 VDC | .094 | .093 |
| 33.0 VDC | .102 | .078 |
| **NS-121575W** | | |
| 8.0 VDC | .341 | .324 |
| 12.0 VDC | .251 | .265 |
| 17.5 VDC | .216 | .188 |

**Table 4: *Average Mean Current Ratings NH Horn 24 Volt Models**

| Voltage | High (95) dBA | Low (90) dBA |
|---|---|---|
| 16.0 VDC | .019 | .017 |
| **24.0 VDC** | **.028** | **.022** |
| 33.0 VDC | .039 | .027 |

*Average RMS Current is per UL average RMS method and Average Mean Current is per UL average mean method. NH models use average mean current. For rated In Rush and Peak current across the UL listed voltage range for both filtered DC and unfiltered VRMS (FWR), see installation instructions.

Table 5: dBA Ratings for Series NS/NH Horn

| Description | Volume | Reverberant dBA @ 10 ft. per UL 464 | | Anechoic dBA @ 10 ft. | |
|---|---|---|---|---|---|
| | | 12 VDC | 24 VDC | 12 VDC | 24 VDC |
| Continous Horn | High | 83 | 87 | 89 | 95 |
| | Low | 76 | 81 | 84 | 90 |
| Code 3 Horn | High | 79 | 82 | 89 | 95 |
| | Low | 72 | 76 | 84 | 90 |

| SYNC MODELS/POWER SUPPLY | | | |
|---|---|---|---|
| MODEL NUMBER | INPUT VOLTAGE (VDC) | AVERAGE MEAN CURRENT @ 24 VDC | MOUNTING OPTIONS |
| SM-12/24-R | 24 | .028 | W |
| DSM-12/24-R | 24 | .035 | W |

NOTES:
SM Sync Module is rated for 3.0 amperes @ 24 VDC;
DSM Sync Module is rated for 3.0 amperes per circuit. The maximum number of interconnected DSM Modules is twenty (20).

NOTIFIER
by Honeywell

# NBG-12L Manual Pull Station

Patented, U.S. Patent No. Des. 428,351; 6,380,846; Other Patents Pending

Document 51015-1

I56-3068-000

## Description

The NBG-12L pull station is a non-coded, dual-action manual pull station with a key-lock reset feature. It provides Notifier control panels with one normally open (N/O) alarm initiating input. The NBG-12L meets the ADAAG controls and operating mechanisms guidelines (section 4.1.3[13]), and the ADA requirement for a 5 lb. maximum pull force to activate the pull station. Operating instructions are molded into the pull station handle along with Braille text. Molded Terminal numbers are also present.

## Ratings

Switch contact (N/O) is gold plated for reliability and rated at 0.25 A at 30 volts (AC or DC).

## Installation

The NBG-12L pull station can be surface mounted to an SB-10 or SB-I/O surface backbox or semi-flush mounted on a standard single-gang, double-gang or 4″ (10.16 cm) square electrical box. The optional BG-TR trim ring can be used if the NBG-12L is to be semi-flush mounted.

## Operation

To activate the dual-action pull station, push in and pull down on the handle. The word 'ACTIVATED' appears after the handle is pulled down. This will remain until the pull station is reset.

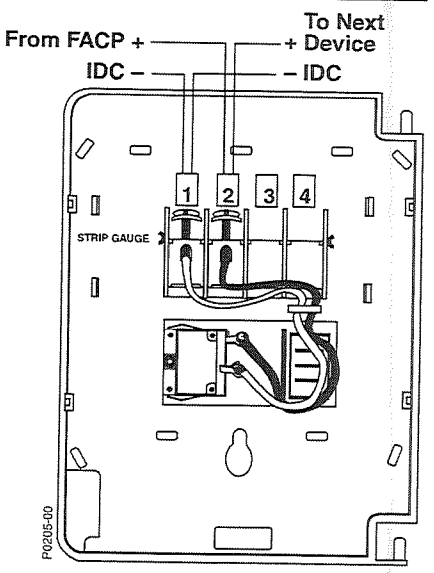
The pull station includes one Single Pole, Single Throw (SPST) Normally Open (N/O) switch which closes upon activation of the pull station.

## Resetting the Pull Station

1. Insert the key into the lock and rotate 1/4 turn counterclockwise.
2. Open the door until the handle returns to normal.
3. Close and lock the door.

**Note:** Closing the door automatically resets the switch to the 'Normal' position. Opening the door will not activate or deactivate the alarm switch.

## Wiring




**WARNING!** Do not loop wiring under any terminals. Break wire run to maintain IDC supervision.

NBG-12L
Manual Pull Station

Document 51015-1

I56-3068-000


**CAUTION!** Do not detach the door of the pull station during installation. The door of the pull station cannot be reattached to the backplate after the backplate has already been installed onto an electrical box.

## CAUTION!

Install the Notifier NBG-12L pull station in accordance with these instructions, applicable NFPA standards, national and local Fire and Electrical codes and the requirements of the AHJ (Authority Having Jurisdiction). Regular testing of the devices should be conducted in accordance with the appropriate NFPA standards. Failure to follow these directions may result in failure of the device to report an alarm condition. Notifier is not responsible for devices that have been improperly installed, tested or maintained.

## ADA Compliance

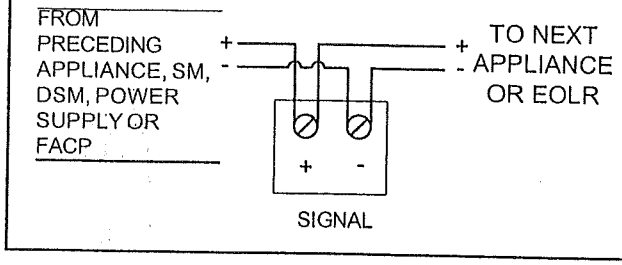
For ADA compliance, if the clear floor space only allows forward approach to an object, the maximum forward reach height allowed is 48 inches (121.92 cm). If the clear floor space allows parallel approach by a person in a wheelchair, the maximum side reach allowed is 54 inches (137.16 cm).

⚠ WARNING: CONTACT WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS (P83983) SERIES NS-24MCW, (P84234) SERIES NS-12 AND 24 VDC SINGLE CANDELA MODELS, (P83600) SERIES NH AND "GENERAL INFORMATION" SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THESE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

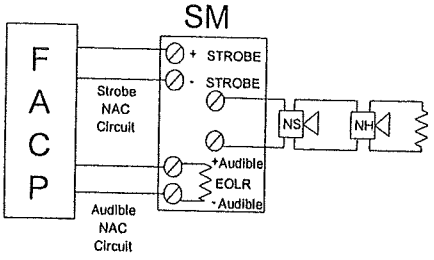
- TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.
- FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.
- COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.
- ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELA SETTINGS WILL AFFECT CURRENT DRAW.
  RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL
  APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCES OR FUSES.
- THE VOLTAGE APPLIED TO THESE PRODUCTS MUST BE WITHIN THEIR "REGULATED VOLTAGE RANGE".
- INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.
- INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.
- THESE APPLIANCES ARE NOT DESIGNED TO BE USED ON CODED SYSTEMS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF.
- FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, 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.
- CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND
  INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.

## WIRING DIAGRAMS

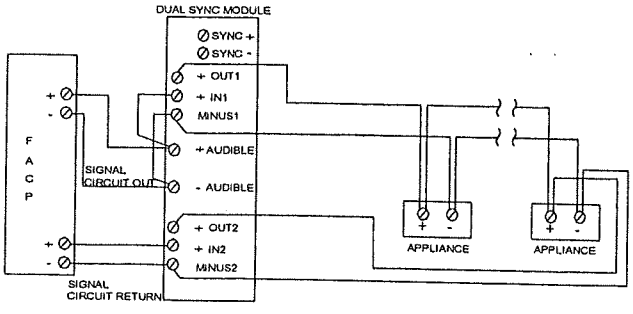
NS/NH APPLIANCE




NS AND NH APPLIANCES SYNCHRONIZED WITH SM MODULE SINGLE CLASS "B" NAC CIRCUIT WITH AUDIBLE SILENCE FEATURE




NS AND NH APPLIANCES SYNCHRONIZED WITH DSM MODULE DUAL CLASS "A" NAC CIRCUIT WITH NO




**NOTE: NS/NH must be set on Code 3 horn tone to achieve synchronized temporal (Code 3) tone. Refer to installation instruction (P83983, P83600 respectively).**

# For detail using SM or DSM Sync Module refer to Data Sheet S3000 or Installation Instructions P83123 for SM and P83177 for DSM.

## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The audible/visual notification appliances shall be Wheelock Series NS Horn Strobe appliances and Series NH Horn appliances or approved equals. The Series NS appliances shall meet and be listed for UL Standard 1971(Emergency Devices for the Hearing-Impaired for Indoor Fire Protection Service). The Series NH Horn shall be UL Listed under Standard 464 (Fire Protective Signaling). The horn strobe shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by the Fire Alarm Control Panel (FACP).

The audible portion of the appliance shall have a minimum of two (2) field selectable settings for dBA levels (90 and 95 dBA) and shall have a choice of continuous or temporal (Code 3) audible outputs.

The strobe portion of the appliance 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 NS shall be of low current design. Where wall mount, Multi-Candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 for 15/30/75/110 candela. The selector switch for selecting the candela setting shall be tamper resistant. The 1575 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with Wheelock's SM, DSM Sync Modules or a Power Supply with Wheelock's built-in Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync module or Power Supply fails to operate, (i.e., contacts remain closed), the strobes shall revert to a non-synchronized flash-rate. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation.

The Series NS Horn Strobes and NH horn shall incorporate a Patented Universal Mounting Plate that shall allow mounting to a single-gang, double-gang, 4-inch square, 100mm European type backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided.

All notification appliances shall be backward compatible.

## SPECIFICATION & ORDERING INFORMATION

| MODEL | STROBE CANDELA | NON-SYNC | SYNC W/SM, DSM | 24 VDC | 12 VDC | 2 WIRE | MOUNTING OPTIONS | AGENCY APPROVALS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | UL | MEA | CSFM | FM | BFP |
| NS-24MCW-FR | 15/30/75/110 | X | X | X | - | X | B,D,E,F,G,H,J,N,O,R,X | X | X | X | X | X |
| NS-24MCW-FW | 15/30/75/110 | X | X | X | - | X | B,D,E,F,G,H,J,N,O,R,X | X | X | X | X | X |
| NS-241575W-FR | 15 (75 on axis) | X | X | X | - | X | B,D,E,F,G,H,J,N,O,R,X | X | X | X | X | X |
| NS-121575W-FR | 15 (75 on axis) | X | X | - | X | X | B,D,E,F,G,H,J,N,O,R,X | X | X | X | X | X |
| NH-12/24-R | 12V<br>24V | X | X | X | X | X | B,D,E,F,G,H,J,N,O,R,X | X | X | X | X | X |

* A power supply with the built-in patented Wheelock Sync Protocol