

BLOCK 1068 LOT 15.01 QUALIFICATION CODE \_\_\_\_\_ ADDRESS (SITE) 103 HENDRICKSON PERMIT NO. 12-3054



# CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII C-12-003860

**I. IDENTIFICATION**

1. Proposed Work Site at: VETERANS PRESS BOX

2. Name of Owner in Fee: BRICK BOARD OF ED

Tel. (732) 785-3000 e-mail \_\_\_\_\_

Address 101 HENDRICKSON

3. Ownership in Fee: Public ☒ Private ☐ Municipality \_\_\_\_\_ Zip code \_\_\_\_\_

4. Principal Contractor: EBW INC Tel. (732) 3630550

Address PO BOX 49 e-mail \_\_\_\_\_

HOWELL, NJ

License No. OR, if new home, Builder Reg. No. P00716 Exp. Date 4/2013

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): \_\_\_\_\_

Federal Emp. ID No. 22-3330961 FAX: (732) 901614

5. Architect or Engineer \_\_\_\_\_ Contact \_\_\_\_\_

Address \_\_\_\_\_ e-mail \_\_\_\_\_

Tel. ( ) \_\_\_\_\_ FAX ( ) \_\_\_\_\_

6. Responsible Person in Charge once Work has Begun RICHARD

Tel. (708) 2788419 FAX: (732) 901614

**V. FEE SUMMARY (for office use only)**

|                                   | Update | Update |
|-----------------------------------|--------|--------|
| 1. Building                       | \$     |        |
| 2. Electrical                     | \$     |        |
| 3. Plumbing                       | \$     |        |
| 4. Fire Protection                | \$     |        |
| 5. Elevator Devices               | \$     |        |
| 6. Subtotal                       | \$     |        |
| 7. Less 20% for State Plan Review | \$     |        |
| 8. Subtotal                       | \$     |        |
| 9. State Permit Surcharge Fee     | \$     |        |
| 10. Subtotal                      | \$     |        |
| 11. Cert. of Occupancy            | \$     |        |
| 12. Other                         | \$     |        |
| 13. TOTAL                         | \$     |        |

**VI. BUILDING/SITE CHARACTERISTICS**

|                                                               | (office use only) |
|---------------------------------------------------------------|-------------------|
| 1. Number of Stories                                          |                   |
| 2. Height of Structure                                        | ft.               |
| 3. Area — Largest Floor                                       | sq. ft.           |
| 4. New Building Area                                          | sq. ft.           |
| 5. Volume of New Structure                                    | cu. ft.           |
| 6. Max. Live Load                                             |                   |
| 7. Max. Occupancy Load                                        |                   |
| 8. If Industrialized Building: State Approved _____ HUD _____ |                   |
| 9. Total Land Area Disturbed                                  | sq. ft.           |
| 10. Flood Hazard Zone                                         |                   |
| 11. Base Flood Elevation                                      | ft.               |
| 12. Wetlands yes _____ no _____                               |                   |

**IIa. PROPOSED WORK**

☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition

☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction

☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

**IIb. SUBCODES**  
(Check all that apply)

☐ Building

☒ Electrical

☐ Plumbing

☒ Fire Protection

☐ Elevator

**FOR OFFICE USE ONLY (Optional)**

| Est. Cost  | Plans Rec'd by | Date Rec'd | Rejection Date | Approval Date | Re-viewer | Resubmission Dates | Re-viewer |
|------------|----------------|------------|----------------|---------------|-----------|--------------------|-----------|
| 400.       | CR             | 10/12/12   |                | 10/23/12      | JJ        |                    |           |
| 700.       |                |            |                | 10/24/12      | SB        |                    |           |
| TOTAL COST |                |            |                |               |           |                    |           |

**VII. DESCRIPTION OF BUILDING USE**

**A. RESIDENTIAL (primary use)**

1. State Specific Use: \_\_\_\_\_

2. Use Group, Proposed: \_\_\_\_\_

3. Change in Use Group, Indicate Present: \_\_\_\_\_

4. No. of dwelling units: Total Units Income-restricted

|                |  |
|----------------|--|
| Gained, Sale   |  |
| Gained, Rental |  |
| Lost, Sale     |  |
| Lost, Rental   |  |

**B. NON-RESIDENTIAL (primary use)**

1. State Specific Use: \_\_\_\_\_

2. Use Group, Proposed: \_\_\_\_\_

3. Change in Use Group, Indicate Present: \_\_\_\_\_

**C. MIXED USE -List secondary use(s):** \_\_\_\_\_

**D. Construct. Classification:** Present \_\_\_\_\_ Proposed \_\_\_\_\_

**III. PLAN REVIEW (optional)**

DO YOU WANT:

1. ☐ Partial Releases

2. ☐ Prototype Processing

**IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?**

|                                                                                 |                                                                   |                                                                 |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------|
| 1. <input type="checkbox"/> Elevators/Escalators/Lifts/Dumbwaiters/Moving Walks | 4. <input type="checkbox"/> Refrigeration Systems                 | 8. <input type="checkbox"/> Smoke Control Systems in Open Wells |
| 2. <input type="checkbox"/> High Pressure Boilers                               | 5. <input type="checkbox"/> Cross-Connections/Backflow Preventers | 9. <input type="checkbox"/> Underground Storage Tanks           |
| 3. <input type="checkbox"/> Pressure Vessels                                    | 6. <input type="checkbox"/> Hazardous Uses/Places of Assembly     | 10. <input type="checkbox"/> Swimming Pools, Spas and Hot Tubs  |
|                                                                                 | 7. <input type="checkbox"/> Sprinklers/Standpipes                 | 11. <input type="checkbox"/> LPGas Tanks                        |



Brick Township  
401 Chambersbridge Rd  
Brick, NJ 08723

Date Issued 12/5/2012  
Control Number C-12-003860  
Permit Number 12-3054  
Permit Issue Date 10/25/2012  
Certificate Number 12-3054

**Certificate**  
Construction Code Division  
(Certificate of Approval)

**Identification**

Work Site Location: 101 - 107 HENDRICKSON AVE Brick Township, NJ Block: 1068 Lot: 15.01 Qual: \_\_\_\_\_  
Owner in Fee: BRICK TOWNSHIP BOARD OF EDUCATION  
Owner Address: 101 HENDRICKSON AVE. BRICK NJ 08724  
Telephone: \_\_\_\_\_  
Contractor: EBW INC WARDELL SECURITY SERV  
Address: PO BOX 44 HOWELL NJ 07731-  
Telephone: (732) 363-0550 Fax: \_\_\_\_\_  
License Number or Builders Registration Number: \_\_\_\_\_ Federal Emp. Number: 22-3330961

Home Warranty Number: \_\_\_\_\_

Type of Warranty Plan: ☐ State ☐ Private

Use Group: E Construction Classification: \_\_\_\_\_

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: ALARM SYSTEM (BURGLAR OR FIRE)

Certificate Comments:

☐ **Certificate of Occupancy**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ **Certificate of Approval**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**

The following conditions must be met no later than or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of:

**Conditions to be met:**

☐ **Certificate of Clearance - Lead Abatement 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

- ☐ Total removal of lead-based paint hazards in scope of work  
☐ Partial or limited time period (     years); see file

☐ **Certificate of Clearance - Asbestos Abatement**

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

- ☐ Total removal of asbestos hazards in scope of work  
☐ Partial or limited time period (     years); see file

☐ **Certificate of Compliance**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

☐ **Temporary Certificate of Occupancy**

The following conditions must be met no later than: or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of:

**Conditions to be met:**

\_\_\_\_\_  
Construction Official

Fee: \$0.00

Check Number: \_\_\_\_\_

Collected By: \_\_\_\_\_

**CERTIFICATION IN LIEU OF OATH**

**I. OWNER SECTION** (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building                      C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical                      C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**II. AGENT SECTION** (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

- ☐ Check if contractor.

Agent Name EBN, INC  
Address PO Box 44  
HOWELL, NJ  
Telephone (732) 907-1636 30550  
Signature [Signature]

**III. ☐ LEAD HAZARD ABATEMENT:** Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.



# FIRE PROTECTION SUBCODE TECHNICAL SECTION



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1068 Lot 15.01 Qualification Code

Work Site Location RETIRED'S SPORTS COMPLEX

Owner in Fee: BRICK BOARDS OF ED

Tel: 732 785-3000 e-mail

Address 101 HENDRICKSON

Contractor: RBW INC Municipality

Address 403044 Tel. 732 830050 e-mail

HOWELL, NJ

Fire Protection Equipment, NJ Div of Fire Safety Permit No.

Fire Protection Equipment, NJ Div of Fire Safety Installer No.

Fire Alarm Contractor No. 400716 Exp. Date 4/2013

Home Improvement Contractor Registration No. or Exemption Reason (if applicable):

Federal Emp. ID No. 82-3330961 FAX: 732 9011614

## B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present Proposed

Constr. Class: Present Proposed

Heating System: ☐ New or ☐ Modification to Existing

Fuel Type: ☐ Gas ☐ Oil ☐ Electric ☐ Solar

Other Fire Suppression/Standpipe System:

Location: [ ] New or [ ] Existing

Location of Main Control Valve: 700.

Total Cost of Fire Protection Work \$ 700.

## JOB SUMMARY (Office Use Only)

### PLAN REVIEW

☐ No Plans Required

☐ Partial - Underslab Utilities Approved

Date: 11/26/12 Approved by: [Signature]

Date: 11/26/12 Approved by: [Signature]

Joint Plan Review Required: [Signature]

☐ Bldg. ☐ Elec. ☐ Plumb. ☐ Elev.

SUBCODE APPROVAL FOR PERMIT

Date: 11/26/12 Approved by: [Signature]

SUBCODE APPROVAL FOR CERTIFICATE

☐ CO ☐ CA

Date: 11/26/12 Approved by: [Signature]

### INSPECTIONS

Type: Alarm System

Failure Approval

Suppression Sys. 11/26/12

Standpipe [Signature]

Fire Pump [Signature]

Pre-Eng. System [Signature]

Mechanical [Signature]

Smoke Control [Signature]

TCO [Signature]

Flam/Combust Tanks [Signature]

Fireplace Venting [Signature]

Final [Signature]

Other [Signature]

## C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

Applicant/Contractor

sign here:

Print name here: RICHARD EISENSTEIN

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK: REPAIR FIRE ALARM

Water Supply Source [Signature]

Method of Alarm/Suppression System Supervision [Signature]

Flammable/Combustible Tanks

Alarm Systems

☐ System

☐ 110v Interconnected

☐ CO Detectors/110v

Alarm Devices (i.e., smoke, heat, pull, water/flow)

Supervisory Devices (i.e., tamper, low/high air)

Signaling Devices (i.e., horn/strobes, bells)

Other Devices FACP

TOTAL

Suppression Systems

Fire Pump GPM Type

Dry Pipe/Alarm Valves

Pre-action Valves

Sprinkler Heads (Dry and Wet)

Standpipes

Pre-engineered Systems

Wet Chemical

Dry Chemical

CO<sub>2</sub> Suppression

Foam Suppression

FM200 Suppression

Other

Other Systems

Kitchen Hood Exhaust System

Smoke Control System

Fuel-Fired Appliances ☐ Gas ☐ Oil ☐ Solid

Fireplace Venting/Metal Chimney

Other

Date Received 12-30-12  
Control # 10-25-12  
Date Issued 10-25-12  
Permit #



EBW INC.  
Wardell Security Services  
PO Box 44  
Howell, NJ 07731  
NJ Permit P00716  
(732) 363-0550 Fax (732) 901-1614

Fire Alarm Installation  
For  
Veterans Athletic Complex  
Press Box



Block 1068 Lot 15.01  
103 Hendrickson Ave  
Brick, NJ



**EBW INC**  
**WARDELL SECURITY SERVICES**  
PO BOX 44  
HOWELL, NJ 07731  
(732) 363-0550 FAX (732) 901-1614  
NJ PERMIT# P00716

September 20, 2012

Brick Board of Education  
Maintenance Department  
Chambersbridge Road  
Attn: Robert Vogel

**VETERANS ATHLETIC COMPLEX PRESS  
BOX**

**EQUIPMENT TO BE INSTALLED**

**1- System Sensor Photoelectric Smoke Detector**

**1-Outdoor Horn/Strobe**

**1- FireLite MS-2 Fire Alarm Control Panel**

THIS DOCUMENT IS PRINTED ON WATERMARKED PAPER, WITH A MULTI-COLORED BACKGROUND AND MULTIPLE SECURITY FEATURES. PLEASE VERIFY AUTHENTICITY.

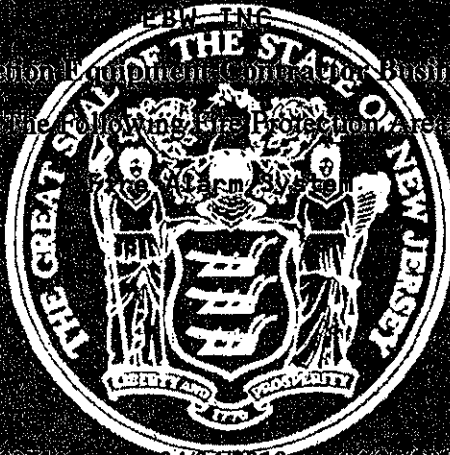


State of New Jersey  
Department of Community Affairs  
Division of Fire Safety



Herewith Issues To:

Fire Protection Equipment Contractor Business Permit  
In The Following Fire Protection Areas:



PD00716

02/02/2010 to 02/20/2011

Permit ID

Date Issued

Lapse Date

Don Grillo, Acting Commissioner

THIS BUSINESS PERMIT IS VALID FOR THE PERIOD OF THREE YEARS. ALL EMPLOYEES OF THE BUSINESS MUST BE CERTIFIED WITHIN "EACH" SPECIALLY LISTED ON THE PERMIT. AN INDIVIDUAL CERTIFIED AS AN "ALL FIRE PROTECTION EQUIPMENT SYSTEMS" CONTRACTOR IS PERMITTED TO WORK ON ALL FIRE PROTECTION EQUIPMENT SYSTEMS AUTHORIZED BY PUBLIC LAW P.L. 2007, c. 289.

Dear Contractor:

Congratulations on receiving a business permit as a Fire Protection Equipment Contractor. The business permit identified above is authorized by the New Jersey Department of Community Affairs to install, test, repair, inspect and maintain fire protection equipment on the systems/services identified on the permit. The services authorized by this permit are restricted to the Fire Protection Equipment Services identified on the business permit application and may be limited within each permit classification.

Let me commend you on your professional attitude and desire to provide a valuable service to citizens of New Jersey. The business permit will be valid for a period of three years. At least one employee of the business must be certified within "each" specialty listed on the permit. An individual certified as an "All Fire Protection Equipment Systems" contractor is permitted to work on all fire protection equipment systems authorized by Public Law P.L. 2007, c. 289.

Please do not hesitate to contact our office if we may further assist you. Our mailing address is: Division of Fire Safety, Contractor Certification and Emblem Unit, P.O. Box 309, Trenton, New Jersey 08625-0809, or phone to at (609) 633-6737.

Sincerely,

Don Grillo, Acting Commissioner



## Advanced systems ideal for small facilities

The Fire-Lite MS-2 and MS-4 Fire Alarm Control Panels bring the latest in microprocessor technology to conventional fire controls. Both panels are compatible with the new I3 smoke detectors from System Sensor, provide such advanced features as drift compensation, maintenance alert, and freeze warning - features normally found in more expensive addressable systems. The Notification Appliance Circuit (NAC) protocol includes the ability to silence audible devices while strobes continue to flash, using only a single pair of wires, as well as automatic synchronization for three manufacturer's protocols of audio/visual devices. The panels are also compatible with conventional input devices such as two- and four-wire smoke detectors, pull stations, waterflow devices, tamper switches and other normally open contact devices.

When coupled with the E-Link MS-2 and MS-4 (see above), the E-Link P2 devices provide additional detector functionality. E-Link devices can be fully configured and configured settings stored on device separately, eliminating the need for repeated programming to the device. This configuration capability can be used with great flexibility to allow the user to change the detector's configuration to suit the application. The user can also change the configuration of the device to suit the application. The user can also change the configuration of the device to suit the application.



the alarm. This wireless connection with Fire-Lite's alarm is an option, yet it is not required. To learn more, call 203-484-7161.

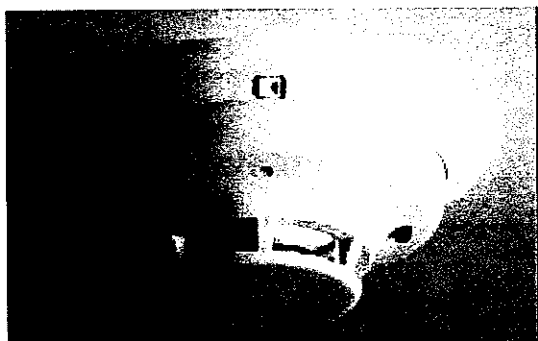
#### Time-Saving Innovations and False Alarm Reduction

Designed to reduce installation and maintenance labor time, both panels feature a Start or End of Alarm mode. In the Start mode, the alarm can be commanded from the front keypad. If no activity takes place after the alarm has been initiated, the system returns to normal operation. To further reduce false alarm potential, the system features a delay to select from verification mode by each zone. This permits testing of zones that may be more prone to nuisance alarms. The detectors have not sensed a false indication or are

When using the MS-4, a special module is available that converts all four indicating currents to be used in a 4-wire configuration, enhancing wire supervision for opens or shorts.

When low-cost conventional fire detection equipment is required and budget is tight, you can rest assured the advanced features found in the MS-2 or MS-4 will meet and exceed requirements for the most demanding applications.

The MS-2 and MS-4 are designed and built by Fire-Lite Alarms, well known throughout the industry for high quality and exceptional design. To learn more about the MS-2/MS-4 or other quality Fire-Lite products, call (203) 484-7161 and ask for the distributor nearest you or visit us at [www.firelite.com](http://www.firelite.com).



#### **i3** Series Photoelectric Smoke Detectors

- The i3 family is founded on three principles: Installation ease, Intelligence, and Instant inspection.
- When used with the MS-2/-4 the 2-wire i3 detectors are capable of generating a remote maintenance signal when they are in need of cleaning.
- Simplified sensitivity measurement, simply use the wireless SENS-RDR device to display the sensitivity in terms of percent per foot obscuration.
- Drift compensation and smoothing algorithms are standard with the i3 line, to minimize nuisance alarms.
- The large wire entry port and in-line terminals provide ample room for neatly routing the wiring inside the base.

#### Key Applications

- Small to medium facilities including:
  - Banks
  - Cinemas
  - Department Stores
  - Food Stores
  - Restaurants
  - Schools (Elementary, Middle and High Schools)
  - Strip Malls
  - Small Retail Outlet Stores
  - Apartment Complexes
- Mid-Rise Buildings
  - Dormitories
  - Small Motels
  - Small Hotels
  - Extended Stay Facilities
- Commercial buildings including:
  - Manufacturing
  - Warehousing
  - Telecommunication Systems
  - Corporate Headquarters
- Healthcare including:
  - Smaller Hospitals and Clinics
  - Nursing Homes
  - Retirement or Assisted Living Facilities

## **Series Photoelectric Smoke Detectors**



### Models Available

#### Two-Wire Models

|       |                              |
|-------|------------------------------|
| 2W-B  | 2-wire standard              |
| 2WT-B | 2-wire standard with thermal |

#### Four-Wire Models

|       |                              |
|-------|------------------------------|
| 4W-B  | 4-wire standard              |
| 4WT-B | 4-wire standard with thermal |

#### Accessories

|          |                                     |
|----------|-------------------------------------|
| 2W-MOD2  | 2-wire loop test/maintenance module |
| SENS-RDR | Sensitivity reader                  |
| RT       | Removal/replacement tool            |
| A77-AB2  | Retrofit adapter bracket            |



### Product Overview

**Plug-in detector line - mounting base included**

**Large wire entry port**

**In-line terminals with SEMS screws**

**Mounts to octagonal and single-gang backboxes, 4-square backboxes, or direct to ceiling**

**Stop-Drop 'N Lock™ attachment to base**

**Removable detector cover and chamber for easy cleaning**

**Built-in remote maintenance signaling**

**Drift compensation and smoothing algorithms**

**Simplified sensitivity measurement**

**Wide angle, dual color LED indication**

**Loop testing via EZ Walk feature**

**Built-in test switch**

System Sensor's *i*<sup>3</sup>™ series smoke detectors represent a significant advancement in conventional detection. The *i*<sup>3</sup> family is founded on three principles: Installation ease, Intelligence, and Instant Inspection.

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

**Intelligence.** *i*<sup>3</sup> detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the *i*<sup>3</sup> line, to minimize nuisance alarms. When connected to the 2W-MOD2 loop test/maintenance module, or a panel equipped with the *i*<sup>3</sup> protocol, 2-wire *i*<sup>3</sup> detectors are capable of generating a remote maintenance signal when they are in need of cleaning. This signal is indicated via an LED located at the module and the panel. To read the sensitivity of *i*<sup>3</sup> detectors, the SENS-RDR is a wireless device that displays the sensitivity in terms of percent per foot obscuration.

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



S911



3011446



7272-1209-210



290-01-E



2093

## Architect/Engineer Specifications

Smoke detector shall be a System Sensor i<sup>3</sup> Series model number \_\_\_\_\_, listed to Underwriters Laboratories UL 268 for Fire Protection Signaling Systems. The detector shall be a photoelectric type (model 2W-B, 4W-B) or a combination photoelectric/thermal (model 2WT-B, 4WT-B) with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3½-inch and 4-inch octagonal, single gang, and 4-inch square back boxes

with a plaster ring, or direct mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5% per foot nominal as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms.

The detector shall provide dual color LED indication which blinks to indicate power up, normal standby, out of sensitivity, alarm, and freeze trouble (model 2WT-B, 4WT-B) conditions. When used in conjunction with the 2W-MOD2 module, 2-wire models shall include a maintenance signal to indicate the need for maintenance at the alarm control panel, and shall provide a loop testing capability to verify the circuit without testing each detector individually.

## Electrical Specifications

Operating Voltage  
Nominal: 12/24V non-polarized  
Min.: 8.5V  
Max.: 35V

Maximum Ripple Voltage  
30% peak to peak of applied voltage

Standby Current  
2-wire: 50 µA maximum average  
4-wire: 50 µA maximum average

Maximum Alarm Current  
2-wire: 130 mA limited by control panel  
4-wire: 20 mA @ 12V, 23mA @ 24V

Peak Standby Current  
2-wire: 100 µA  
4-wire: n/a

Alarm Contact Ratings  
2-wire: n/a  
4-wire: 0.5 A @ 30V AC/DC

## LED Modes

| LED Mode           | Green LED              | Red LED                |
|--------------------|------------------------|------------------------|
| Power up           | Blink every 10 seconds | Blink every 10 seconds |
| Normal (standby)   | Blink every 5 seconds  | off                    |
| Out of sensitivity | off                    | Blink every 5 seconds  |
| Freeze trouble     | off                    | Blink every 10 seconds |
| Alarm              | off                    | Solid                  |

## Power Up Sequence for LED Indication

| Condition                     | Duration   |
|-------------------------------|------------|
| Initial LED status indication | 80 seconds |

## Physical Specifications

Operating Temperature Range  
2W-B and 4W-B: 32°F–120°F (0°C–49°C)  
2WT-B and 4WT-B: 32°F–100°F (0°C–37.8°C)

Operating Humidity Range  
0 to 95% RH non-condensing

Thermal Sensor  
135°F (57.2°C) fixed

Freeze Trouble  
2WT-B and 4WT-B only: 41°F (5°C)

Sensitivity  
2.5%/ft. nominal

Input Terminals  
14–22 AWG

Dimensions (including base)  
5.3 inches (127 mm) diameter  
2.0 inches (51 mm) height

Weight  
6.3 oz. (178 grams)

Mounting  
3½-inch octagonal back box  
4-inch octagonal back box  
Single gang back box  
4-inch square back box with a plaster ring  
Direct mount to ceiling

## Ordering Information

| Model    | Thermal                                              | Wiring | Alarm Current                        |
|----------|------------------------------------------------------|--------|--------------------------------------|
| 2W-B     | No                                                   | 2-wire | 130 mA max. limited by control panel |
| 2WT-B    | Yes                                                  | 2-wire | 130 mA max. limited by control panel |
| 4W-B     | No                                                   | 4-wire | 20 mA @ 12V, 23mA @ 24V              |
| 4WT-B    | Yes                                                  | 4-wire | 20 mA @ 12V, 23mA @ 24V              |
| Model    | Description                                          |        |                                      |
| 2W-MOD2  | 2-wire loop test / maintenance module                |        |                                      |
| SENS-RDR | Sensitivity reader                                   |        |                                      |
| RT       | Removal / replacement tool                           |        |                                      |
| A77-AB2  | Retrofit adapter bracket, 6.6 in. (16.76cm) diameter |        |                                      |

## System Sensor Sales and Service

**System Sensor Headquarters**  
3825 Ohio Avenue  
St. Charles, IL 60174  
Ph: 800/SENSOR2  
Fx: 630/377-6495  
www.systemsensor.com

**System Sensor Canada**  
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Fx: 905.812.0771  
  
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Ph: 44.1403.891920  
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**System Sensor in China**  
Ph: 86.29.8832.0119  
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**System Sensor in Singapore**  
Ph: 65.6273.2230  
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**System Sensor – Far East**  
Ph: 85.22.191.9003  
Fx: 85.22.736.6580  
  
**System Sensor – Australia**  
Ph: 613.54.281.142  
Fx: 613.54.281.172

**System Sensor – India**  
Ph: 91.124.637.1770 x.2700  
Fx: 91.124.637.3118  
  
**System Sensor – Russia**  
Ph: 70.95.937.7982  
Fx: 70.95.937.7983



## Selectable Output Horns, Strobes, and Horn/Strobes

*SpectrAlert® Advance selectable-output horns, strobes, and horn/strobes are rich with features guaranteed to cut installation times and maximize profits.*



**SPECTRAlert**  
ADVANCE  
from System Sensor

### Features

- Electrically compatible with existing SpectrAlert products
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Plug-in design
- Field selectable candela settings on wall and ceiling units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185
- Same mounting plate for wall- and ceiling-mount units
- Shorting spring on mounting plate for continuity check before installation
- Tamper resistant construction
- Outdoor wall and ceiling products rated from -40°F to 151°F
- Design allows minimal intrusion into the back box
- Horn rated at 88+ dbA at 16 volts
- Rotary switch for horn tone and three volume selections
- Outdoor products UL listed to UL 1638 (strobe) and UL 464 (horn) outdoor requirements
- Outdoor products NEMA 4X rated
- Compatible with MDL sync module

**The SpectrAlert Advance series** of notification appliances is designed to simplify installations, with features such as plug in designs, instant feedback messages to ensure correct installation of individual devices, and 11 field-selectable candela settings for wall and ceiling strobes and horn/strobes.

When installing Advance products, first attach a universal mounting plate to a four-inch square, four-inch octagon or double-gang junction box. The two-wire mounting plate attaches to a single-gang junction box.

Next, connect the notification appliance circuit wiring to the SEMS terminals on the mounting plate.

Finally, attach the horn, strobe or horn/strobe to the mounting plate by inserting the product's tabs in the mounting plate's grooves. The device will rotate into position, locking the product's pins into the mounting plate's terminals. The device will temporarily hold in place with a catch until it is secured with a captured mounting screw.

The SpectrAlert Advance series includes outdoor notification appliances. Outdoor strobes and horn/strobes (two wire and four wire) are available for wall or ceiling. Outdoor horns are available for wall only. All System Sensor outdoor products are rated between minus 40 degrees Fahrenheit and 151 degrees Fahrenheit in wet or dry applications.

### Agency Listings

SIGNALING



S4011  
S5512  
S3593



3023572

**MEA**  
approved

MEA452-05-E



7125-1653:186 (indoor strobes)  
7300-1653:187 (outdoor strobes)  
7125-1653:188 (horn/strobes)  
chime/strobes  
7135-1653:189 (horns, chimes)

# SpectrAlert Advance Specifications

## Architect/Engineer Specifications

### General

SpectrAlert Advance horns, strobes and horn/strobes shall mount to a standard 4 x 4 x 1½-inch back box, 4-inch octagon back box or double-gang back box. Two-wire products shall also mount to a single-gang 2 x 4 x 1½-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, when used with the Sync-Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync-Circuit Module, 12-volt rated notification appliance circuit outputs shall operate between nine and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 17 and 33 volts. Indoor SpectrAlert Advance products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC, or full-wave rectified, unfiltered power supply. Strobes and horn/strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185.

### Strobe

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

### Horn/Strobe Combination

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

### Outdoor Products

SpectrAlert Advance outdoor horns, strobes and horn/strobes shall be listed for outdoor use by UL and shall operate between minus 40 degrees and 151 degrees Fahrenheit. The products shall be listed for use with a System Sensor outdoor/weatherproof back box with half inch and three-fourths inch conduit entries.

### Synchronization Module

The module shall be a System Sensor Sync-Circuit model MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn/strobe models over a single pair of wires. The module shall mount to a 4½/16 x 4½/16 x 2½-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

## Physical/Electrical Specifications

|                                                           |                                                           |
|-----------------------------------------------------------|-----------------------------------------------------------|
| Standard Operating Temperature                            | 32°F to 120°F (0°C to 49°C)                               |
| K Series Operating Temperature                            | -40°F to 151°F (-40°C to 66°C)                            |
| Humidity Range                                            | 10 to 93% non-condensing (indoor products)                |
| Strobe Flash Rate                                         | 1 flash per second                                        |
| Nominal Voltage                                           | Regulated 12DC/FWR or regulated 24DC/FWR <sup>1</sup>     |
| Operating Voltage Range <sup>2</sup>                      | 8 to 17.5 V (12V nominal) or 16 to 33 V (24 nominal)      |
| Input terminal wire gauge                                 | 12 to 18 AWG                                              |
| Ceiling mount dimensions (including lens)                 | 6.8" diameter x 2.5" high (173 mm diameter x 64 mm high)  |
| Wall mount dimensions (including lens)                    | 5.6"L x 4.7"W x 2.5"D (142 mm L x 119 mm W x 64 mm D)     |
| Horn dimensions                                           | 5.6"L x 4.7"W x 1.3"D (142 mm L x 119 mm W x 33 mm D)     |
| Wall-mount back box skirt dimensions (BBS-2, BBSW-2)      | 5.9"L x 5.0"W x 2.2"D (151 mm L x 128 mm W x 56 mm D)     |
| Ceiling-mount back box skirt dimensions (BBSC-2, BBSCW-2) | 7.1" diameter x 2.25" high (180 mm diameter x 57 mm high) |
| Wall-mount weatherproof back box dimensions (SA-WBB)      | 5.7"L x 5.1"W x 2.0"D (145 mm L x 130 mm W x 51 mm D)     |
| Ceiling-mount weatherproof back box dimensions (SA-WBBC)  | 7.1" diameter x 2.0" high (180 mm diameter x 51 mm high)  |
| Wall-mount trim ring dimensions (TR-HS, TRW-HS)           | 5.7"L x 4.812"W x 0.35"D (146 mm L x 122 mm W x 9 mm D)   |
| Ceiling-mount trim ring dimensions (TRC-HS, TRCW-HS)      | 6.9" diameter x 0.35 high (176 mm diameter x 9 mm high)   |

### Notes:

1. Full Wave Rectified (FWR) voltage is a non-regulated, time varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12 V nominal only for 15 and 15/75 cd.

## UL Current Draw Data

### UL Max. Strobe Current Draw (mA RMS)

|                        | Candela | 8-17.5 Volts |     | 16-33 Volts |     |
|------------------------|---------|--------------|-----|-------------|-----|
|                        |         | DC           | FWR | DC          | FWR |
| Standard Candela Range | 15*     | 123          | 128 | 66          | 71  |
|                        | 15/75*  | 142          | 148 | 77          | 81  |
|                        | 30*     | NA           | NA  | 94          | 96  |
|                        | 75*     | NA           | NA  | 158         | 153 |
|                        | 95*     | NA           | NA  | 181         | 176 |
|                        | 110     | NA           | NA  | 202         | 195 |
| High Candela Range     | 115     | NA           | NA  | 210         | 205 |
|                        | 135     | NA           | NA  | 228         | 207 |
|                        | 150     | NA           | NA  | 246         | 220 |
|                        | 177     | NA           | NA  | 281         | 251 |
|                        | 185     | NA           | NA  | 286         | 258 |

### UL Max. Horn Current Draw (mA RMS)

| Sound Pattern | dB     | 8-17.5 Volts |     | 16-33 Volts |     |
|---------------|--------|--------------|-----|-------------|-----|
|               |        | DC           | FWR | DC          | FWR |
| Temporal      | High   | 57           | 55  | 69          | 75  |
| Temporal      | Medium | 44           | 49  | 58          | 69  |
| Temporal      | Low    | 38           | 44  | 44          | 48  |
| Non-temporal  | High   | 57           | 56  | 69          | 75  |
| Non-temporal  | Medium | 42           | 50  | 60          | 69  |
| Non-temporal  | Low    | 41           | 44  | 50          | 50  |
| Coded         | High   | 57           | 55  | 69          | 75  |
| Coded         | Medium | 44           | 51  | 56          | 69  |
| Coded         | Low    | 40           | 46  | 52          | 50  |

### UL Max. Current Draw (mA RMS), 2-wire Horn/Strobe, Standard Candela Range (15-115 cd)

| DC Input            | 8-17.5 Volts |       | 16-33 Volts |       | 30  | 75  | 95  | 110 | 115 |
|---------------------|--------------|-------|-------------|-------|-----|-----|-----|-----|-----|
|                     | 15           | 15/75 | 15          | 15/75 |     |     |     |     |     |
| Temporal High       | 137          | 147   | 79          | 90    | 107 | 176 | 194 | 212 | 218 |
| Temporal Medium     | 132          | 144   | 69          | 80    | 97  | 157 | 182 | 201 | 210 |
| Temporal Low        | 132          | 143   | 66          | 77    | 93  | 154 | 179 | 198 | 207 |
| Non-temporal High   | 141          | 152   | 91          | 100   | 116 | 176 | 201 | 221 | 229 |
| Non-temporal Medium | 133          | 145   | 75          | 85    | 102 | 163 | 187 | 207 | 216 |
| Non-temporal Low    | 131          | 144   | 68          | 79    | 96  | 156 | 182 | 201 | 210 |
| <b>FWR Input</b>    |              |       |             |       |     |     |     |     |     |
| Temporal High       | 136          | 155   | 88          | 97    | 112 | 168 | 190 | 210 | 218 |
| Temporal Medium     | 129          | 152   | 78          | 88    | 103 | 160 | 184 | 202 | 206 |
| Temporal Low        | 129          | 151   | 76          | 86    | 101 | 160 | 184 | 194 | 201 |
| Non-temporal High   | 142          | 161   | 103         | 112   | 126 | 181 | 203 | 221 | 229 |
| Non-temporal Medium | 134          | 155   | 85          | 95    | 110 | 166 | 189 | 208 | 216 |
| Non-temporal Low    | 132          | 154   | 80          | 90    | 105 | 161 | 184 | 202 | 211 |

### UL Max. Current Draw (mA RMS), 2-wire Horn/Strobe, High Candela Range (135-185 cd)

| DC Input            | 16-33 Volts |     |     |     | FWR Input           | 16-33 Volts |     |     |     |
|---------------------|-------------|-----|-----|-----|---------------------|-------------|-----|-----|-----|
|                     | 135         | 150 | 177 | 185 |                     | 135         | 150 | 177 | 185 |
| Temporal High       | 245         | 259 | 290 | 297 | Temporal High       | 215         | 231 | 258 | 265 |
| Temporal Medium     | 235         | 253 | 288 | 297 | Temporal Medium     | 209         | 224 | 250 | 258 |
| Temporal Low        | 232         | 251 | 282 | 292 | Temporal Low        | 207         | 221 | 248 | 256 |
| Non-temporal High   | 255         | 270 | 303 | 309 | Non-temporal High   | 233         | 248 | 275 | 281 |
| Non-temporal Medium | 242         | 259 | 293 | 299 | Non-temporal Medium | 219         | 232 | 262 | 267 |
| Non-temporal Low    | 238         | 254 | 291 | 295 | Non-temporal Low    | 214         | 229 | 256 | 262 |

## Candela Derating

For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.

| Strobe Output (cd) |                         |
|--------------------|-------------------------|
| Listed Candela     | Candela rating at -40°F |
| 15                 | Do not use below 32°F   |
| 15/75              |                         |
| 30                 |                         |
| 75                 |                         |
| 95                 | 44                      |
| 110                | 70                      |
| 115                | 110                     |
| 135                | 115                     |
| 150                | 135                     |
| 177                | 150                     |
| 185                | 177                     |

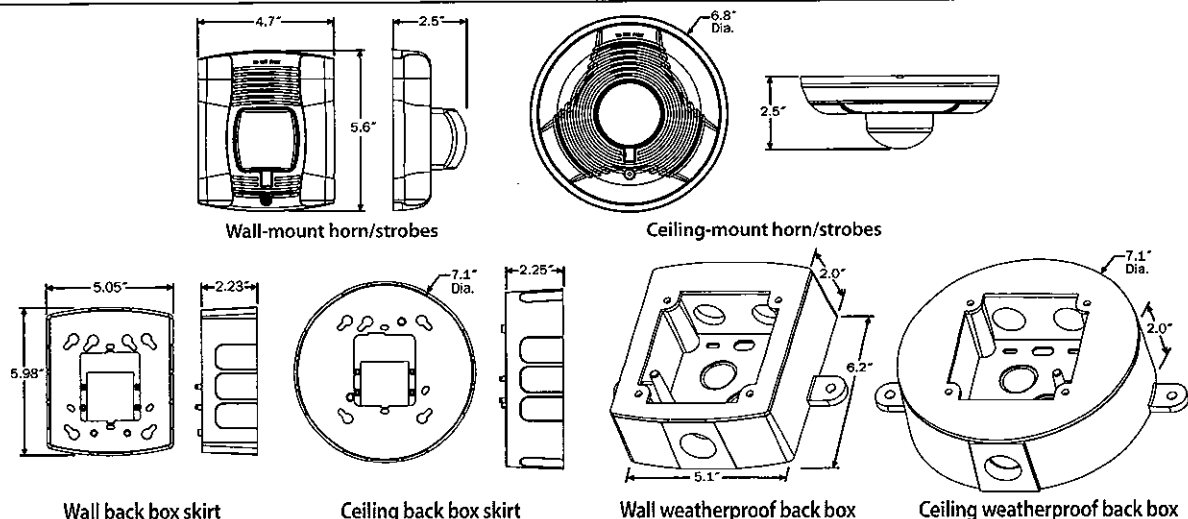
## Horn Tones and Sound Output Data

### Horn and Horn/Strobe Output (dBA)

| Switch Position | Sound Pattern | dB     | 8-17.5 Volts |     | 16-33 Volts |     | 24 Volt Nominal |     |          |     |
|-----------------|---------------|--------|--------------|-----|-------------|-----|-----------------|-----|----------|-----|
|                 |               |        | DC           | FWR | DC          | FWR | Reverberant     |     | Anechoic |     |
|                 |               |        |              |     |             |     | DC              | FWR | DC       | FWR |
| 1               | Temporal      | High   | 78           | 78  | 84          | 84  | 88              | 88  | 99       | 98  |
| 2               | Temporal      | Medium | 74           | 74  | 80          | 80  | 86              | 86  | 96       | 96  |
| 3               | Temporal      | Low    | 71           | 73  | 76          | 76  | 83              | 80  | 94       | 89  |
| 4               | Non-temporal  | High   | 82           | 82  | 88          | 88  | 93              | 92  | 100      | 100 |
| 5               | Non-temporal  | Medium | 78           | 78  | 85          | 85  | 90              | 90  | 98       | 98  |
| 6               | Non-temporal  | Low    | 75           | 75  | 81          | 81  | 88              | 84  | 96       | 92  |
| 7†              | Coded         | High   | 82           | 82  | 88          | 88  | 93              | 92  | 101      | 101 |
| 8†              | Coded         | Medium | 78           | 78  | 85          | 85  | 90              | 90  | 97       | 98  |
| 9†              | Coded         | Low    | 75           | 75  | 81          | 81  | 88              | 85  | 96       | 92  |

†Settings 7, 8, and 9 are not available on 2-wire horn/strobe.

## SpectrAlert Advance Dimensions



## SpectrAlert Advance Ordering Information

| Model                       | Description                                   |
|-----------------------------|-----------------------------------------------|
| <b>Wall Horn/Strobes</b>    |                                               |
| P2R*†                       | 2-wire Horn/Strobe, Standard cd†, Red         |
| P2RH*                       | 2-wire Horn/Strobe, High cd, Red              |
| P2RK*‡                      | 2-wire Horn/Strobe, Standard cd, Red, Outdoor |
| P2RHK‡                      | 2-wire Horn/Strobe, High cd, Red, Outdoor     |
| P2W*                        | 2-wire Horn/Strobe, Standard cd, White        |
| P2WH*                       | 2-wire Horn/Strobe, High cd, White            |
| P4R*                        | 4-wire Horn/Strobe, Standard cd, Red          |
| P4RH*                       | 4-wire Horn/Strobe, High cd, Red              |
| P4RK‡                       | 4-wire Horn/Strobe, Standard cd, Red, Outdoor |
| P4RHK‡                      | 4-wire Horn/Strobe, High cd, Red, Outdoor     |
| P4W*                        | 4-wire Horn/Strobe, Standard cd, White        |
| P4WH*                       | 4-wire Horn/Strobe, High cd, White            |
| <b>Wall Strobes</b>         |                                               |
| SR*†                        | Strobe, Standard cd, Red                      |
| SRH*†                       | Strobe, High cd, Red                          |
| SRK‡                        | Strobe, Standard cd, Red, Outdoor             |
| SRHK‡                       | Strobe, High cd, Red, Outdoor                 |
| SW*†                        | Strobe, Standard cd, White                    |
| SWH*†                       | Strobe, High cd, White                        |
| <b>Ceiling Horn/Strobes</b> |                                               |
| PC2R*                       | 2-wire Horn/Strobe, Standard cd, Red          |
| PC2RH*                      | 2-wire Horn/Strobe, High cd, Red              |
| PC2RK‡                      | 2-wire Horn/Strobe, Standard cd, Red, Outdoor |
| PC2RHK‡                     | 2-wire Horn/Strobe, High cd, Red, Outdoor     |
| PC2W*†                      | 2-wire Horn/Strobe, Standard cd, White        |
| PC2WH*†                     | 2-wire Horn/Strobe, High cd, White            |
| PC4R                        | 4-wire Horn/Strobe, Standard cd, Red          |
| PC4RH                       | 4-wire Horn/Strobe, High cd, Red              |
| PC4RK                       | 4-wire Horn/Strobe, Standard cd, Red, Outdoor |
| PC4RHK‡                     | 4-wire Horn/Strobe, High cd, Red, Outdoor     |

| Model                                 | Description                            |
|---------------------------------------|----------------------------------------|
| <b>Ceiling Horn/Strobes (cont'd.)</b> |                                        |
| PC4W                                  | 4-wire Horn/Strobe, Standard cd, White |
| PC4WH                                 | 4-wire Horn/Strobe, High cd, White     |
| <b>Ceiling Strobes</b>                |                                        |
| SCR*                                  | Strobe, Standard cd, Red               |
| SCRH*                                 | Strobe, High cd, Red                   |
| SCRK‡                                 | Strobe, Standard cd, Red, Outdoor      |
| SCRHK‡                                | Strobe, High cd, Red, Outdoor          |
| SCW*†                                 | Strobe, Standard cd, White             |
| SCWH*†                                | Strobe, High cd, White                 |
| <b>Horns</b>                          |                                        |
| HR                                    | Horn, Red                              |
| HRK‡                                  | Horn, Red, Outdoor                     |
| HW                                    | Horn, White                            |
| <b>Accessories</b>                    |                                        |
| BBS-2                                 | Back Box Skirt, Wall, Red              |
| BBSW-2                                | Back Box Skirt, Wall, White            |
| BBSC-2                                | Back Box Skirt, Ceiling, Red           |
| BBSCW-2                               | Back Box Skirt, Ceiling, White         |
| TR-HS                                 | Trim Ring, Wall, Red                   |
| TRW-HS                                | Trim Ring, Wall, White                 |
| TRC-HS                                | Trim Ring, Ceiling, Red                |
| TRCW-HS                               | Trim Ring, Ceiling, White              |

### Notes:

\* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2R-P.

† Add "-SP" to model number for "FUEGO" marking on cover, e.g., P2R-SP.

‡ "Standard cd," refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd," refers to strobes that include 135, 150, 177, and 185 candela settings.

All outdoor units ending in "K" include a weatherproof back box.

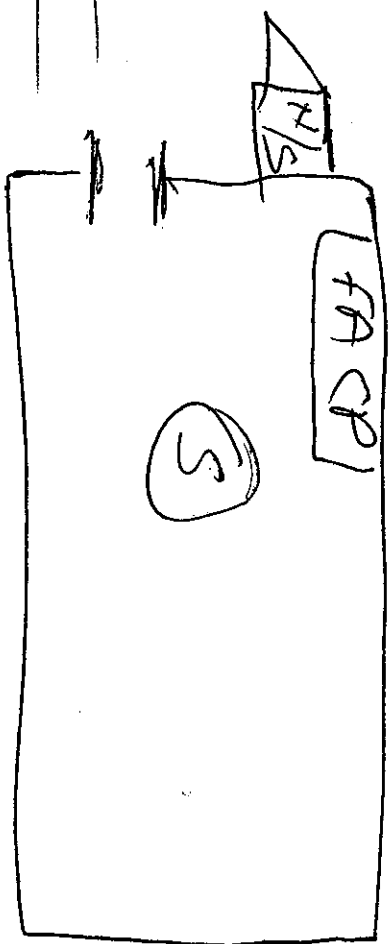
‡ Add "-R" to model number for weatherproof replacement device (no back box included).



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Product specifications subject to change without notice. Visit [systemsensorm.com](http://systemsensorm.com) for current product information, including the latest version of this data sheet.  
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WTS PRESS Box

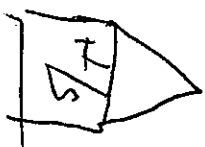


LEGEND

FACP - CONTROL PANEL

⑤ - PHOTOELECTRIC

ADDRESSABLE  
SMOKE DETECTOR

 - OUTDOOR  
HORN/SPEAKER

BLEACHER SEATS

FIELD





1d-3054  
10-25-12

U.C.C. F120 (rev. 11/09) 1 White = Inspector Copy 2 Canary = Office Copy 3 Pink = Office Copy 4 Gold = Applicant Copy

### 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: Veterans Athletic Complex Press Box  
 Address: 103-107 Hendrickson Ave  
 Description of property: Press Box  
 Occupancy type: Commercial  
 Name of property representative: Robert Vogel  
 Address: 103-107 Hendrickson Ave  
 Phone: ~ ~ ~ Fax: ~ ~ ~ E-mail: ~ ~ ~  
 Authority having jurisdiction over this property: Brick, NJ  
 Phone: ~ ~ ~ Fax: ~ ~ ~ E-mail: ~ ~ ~

#### 2. FIRE ALARM SYSTEM INSTALLATION, SERVICE, AND TESTING INFORMATION

Installation contractor for this equipment: RBW, Inc.  
 Address: PO Box 44, Howell, NJ 07731  
 Phone: (732) 363-0550 Fax: ~ ~ ~ E-mail: reisenstein@ebwinc.net  
 Service organization for this equipment: EBW, Inc.  
 Address: PO Box 44, Howell, NJ 07731  
 Phone: (732) 363-0550 Fax: (732) 901-1614 E-mail: ~ ~ ~  
 Location of as-built drawings: On-Site Location of historical test reports: On-Site  
 Location of system operation and maintenance manuals: On-Site  
 A contract for test and inspection in accordance with NFPA standards is in effect as of 07/06/12  
 Contracted testing company: EBW, Inc.  
 Address: PO Box 44, Howell, NJ 07731  
 Phone: (732) 363-0550 Fax: (732) 901-1614 E-mail: reisenstein@ebwinc.net  
 Contract expires: ~ ~ ~ Contract number: ~ ~ ~ Frequency of routine inspections: Yearly

#### 3. TYPE OF FIRE ALARM SYSTEM OR SERVICE

NFPA 72 Chapter Reference of System Type: 6  
 Name of organization receiving alarm signals with phone numbers (if applicable):  
 Alarm: N/A Phone: ~ ~ ~  
 Supervisory: N/A Phone: ~ ~ ~  
 Trouble: N/A Phone: ~ ~ ~  
 Entity to which alarms are retransmitted: N/A Phone: N/A  
 Method of retransmission of alarms to that organization or location: N/A

FIGURE 4.5.2.1 Record of Completion.

**3. TYPE OF FIRE ALARM SYSTEM OR SERVICE (continued)**

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: N/A

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: 2 Style: D Class: B

**5. ALARM-INITIATING DEVICES AND CIRCUITS**

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

Quantity: 1 Style: Addressable Class: \_\_\_\_\_

**5.1 Manual Initiating Devices****5.1.1 Manual Pull Stations**

Number of manual pull stations: N/A

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

**5.2 Automatic Initiating Devices****5.2.1 Area Smoke Detectors**

Number of smoke detectors: 1

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: N/A

Type of coverage: \_\_\_\_\_

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: N/A

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: \_\_\_\_\_

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

**5.2.5 Alarm Verification**

Number of devices subject to alarm verification: 28

Alarm verification on this system is: ☒ Enabled ☐ Disabled ☐ Set for 60 seconds

FIGURE 4.5.2.1 Continued



**6. SUPERVISORY SIGNAL-INITIATING DEVICES AND CIRCUITS****6.1 Sprinkler System**

Number of valve supervisory switches: \_\_\_\_\_

Type of devices: ☐ Addressable ☐ Conventional ☐ Coded ☐ Transmitter ☒ N/A**6.2 Fire Pump**Type of fire pump: ☐ Electric ☐ DieselType 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: \_\_\_\_\_

**7. ANNUNCIATORS****7.1 Annunciator 1** ☒ Local ☐ RemoteType: ☐ Addressable ☐ Directory ☐ Graphic ☐ N/A Location: FACP**7.2 Annunciator 2** ☐ Local ☐ RemoteType: ☐ Addressable ☐ Directory ☐ Graphic ☒ N/A Location: \_\_\_\_\_**7.3 Annunciator 3** ☐ Local ☐ RemoteType: ☐ Addressable ☐ Directory ☐ Graphic ☒ N/A Location: \_\_\_\_\_**8. ALARM NOTIFICATION DEVICES AND CIRCUITS****8.1 Emergency Voice Alarm Service**Number of single voice alarm channels: N/A Number of multiple voice alarm channels: \_\_\_\_\_

Number of speakers: \_\_\_\_\_ Number of speaker zones: \_\_\_\_\_

**8.2 Telephone Jacks**Number of telephone jacks installed: N/A Number of telephone handsets stored on site: \_\_\_\_\_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: 1 Style: D Class: B

FIGURE 4.5.2.1 Continued

**8. ALARM NOTIFICATION DEVICES AND CIRCUITS (continued)****8.4 Types and Quantities of Nonvoice Notification Appliances Installed**

Bells: \_\_\_\_\_ With visual device: \_\_\_\_\_ Horns: 1 With visual device: 1  
 Chimes: \_\_\_\_\_ With visual device: \_\_\_\_\_ Bells: \_\_\_\_\_ With visual device: \_\_\_\_\_  
 Visual devices without audible devices: 2 Other (describe): \_\_\_\_\_

**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: 120VAC Amps: 6  
 Overcurrent protection: Type Circuit Breaker Amps: 15  
 Location (of primary supply panelboard): Next to FACP  
 Disconnecting means location: N/A

**10.2 Secondary Power**

Location: FACP Type: Battery Nominal voltage: 24VDC Current rating: 5 AH  
 Number of standby batteries: 2 Amp hour rating: 5  
 Location of emergency generator: N/A  
 Location of fuel storage: N/A  
 Calculated capacity of secondary power to drive the system  
 In standby mode: 24 Hrs In alarm mode: 5 Min

**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, National Electrical Code, Article 760  
☒ Manufacturer's published instructions ☐ Other (please specify): \_\_\_\_\_  
 System deviations from referenced NFPA standards: \_\_\_\_\_

Signed: \_\_\_\_\_ Printed name: Richard Eisenstein Date: August 6, 2012  
 Organization: EBW, Inc. Title: General Manager Phone: 732-363-0550

**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, National Electrical Code, Article 760  
☒ Manufacturer's published instructions ☐ Other (please specify): \_\_\_\_\_  
☐ Documentation in accordance with Inspection and Testing Form (Figure 10.6.2.3) is attached  
 Signed: \_\_\_\_\_ Printed name: Richard Eisenstein Date: August 6, 2012  
 Organization: EBW, Inc. Title: General Manager Phone: 732-363-0550

FIGURE 4.5.2.1 Continued

**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: [Signature] Printed name: Richard Eisenstein Date: November 16, 2012  
Organization: EBW, Inc Title: General Manager Phone: 732-363-0550

**13.2 System Service Contractor**

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

Signed: [Signature] Printed name: Richard Eisenstein Date: November 16, 2012  
Organization: EBW, Inc Title: General Manager Phone: 732-363-0550

**13.3 Central Station**

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

Signed: \_\_\_\_\_ Printed name: COPS Monitoring Date: November 16, 2012  
Organization: \_\_\_\_\_ Title: \_\_\_\_\_ Phone: 800-633-2677

**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: \_\_\_\_\_ Date: \_\_\_\_\_  
Organization: \_\_\_\_\_ Title: \_\_\_\_\_ Phone: \_\_\_\_\_

FIGURE 4.5.2.1 *Continued*



# CONSTRUCTION PERMIT

12-3054

Date Issued \_\_\_\_\_  
Control # C-12-003860  
Permit # 10-25-12

IDENTIFICATION Block: 1068 Lot: 15.01 Qualifier \_\_\_\_\_  
Work Site Location: 101 - 107 HENDRICKSON AVE Brick Township, NJ Contractor EBW INC WARDELL SECURITY SERV  
Owner in Fee BRICK TOWNSHIP BOARD OF EDUCATION Address PO BOX 44 HOWELL NJ 07731-  
101 HENDRICKSON AVE. BRICK NJ 08724 Telephone: (732) 363-0550  
Telephone: \_\_\_\_\_ Lic. No. or Bldrs. Reg. No. \_\_\_\_\_  
Federal Employee No. 22-3330961

Is hereby granted permission to perform the following work:

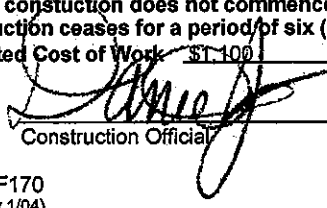
- ☐ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT  
☒ ELECTRICAL ☒ FIRE PROTECTION ☐ DEMOLITION  
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT (Subchapter 8 only) ☐ OTHER

DESCRIPTION OF WORK:

ALARM SYSTEM (BURGLAR OR FIRE)

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$1,100

  
Construction Official

10-25-12  
Date

U.C.C. F170  
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

## PAYMENTS (Office Use Only)

|                  |        |
|------------------|--------|
| Building         | \$0    |
| Electrical       | \$0    |
| Plumbing         | \$0    |
| Fire Protection  | \$0    |
| Elevator Devices | \$0    |
| Other            | \$0.00 |
| DCA Training Fee | \$0    |
| CO Fee           | \$0    |
| Other            | \$0    |
| Total            | \$0    |
| Check No.        |        |
| Cash             | \$0    |
| Credit           | \$0    |
| Collected By     |        |

## REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

- ☒ Required inspections for all subcodes for one- and two-family dwellings are as follows:
1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
  2. Foundations and all walls up to grade level prior to back filling.
  3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and/or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
  4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

- ☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

- ☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

- ☐ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.