

BUILDING CLASSIFICATIONS & CODES	
OCCUPANCY GROUP:	B
USE:	OFFICE
CONSTRUCTION TYPE:	II-B
STORIES:	4
WET SPRINKLER SYSTEM:	FULLY
DRY SPRINKLER SYSTEM:	NONE
REQUIREMENTS:	CODE REQUIRED SYSTEM PER IFC SECTION 907.2.2
APPLICABLE CODES:	2021 IBC 2019 NFPA 72
	2021 IFC 2023 NFPA 70
	2021 IMC

SYSTEM TYPE & MONITORING	
SYSTEM CLASSIFICATION:	(NFPA 72, CHAPTER 26), REMOTE STATION
SYSTEM TYPE:	ADDRESSABLE
WIRING CLASSIFICATION:	NAC - CLASS B
	SLC - CLASS A
	COMMUNICATION RISER - CLASS B
NOTIFICATION TYPE:	TEMPORAL PATTERN
MONITORING:	THIS SYSTEM IS AND WILL CONTINUE TO BE MONITORED BY A REMOTE SUPERVISING STATION, PER NFPA 72 CHAPTER 26, SECTION 3.
MONITORING COMPANY:	CFP
PHONE NUMBER:	1-800-662-1711
ACCOUNT NUMBER:	A21-0964

SCOPE OF WORK	
SCOPE OF WORK DESCRIPTION	
1.	REPLACE ONE (1) HORN STROBE WITH NEW EST HORN STROBE.
2.	PROVIDE & INSTALL ONE (1) EST HORN STROBE.
3.	REPLACE FOUR (4) STROBES WITH NEW EST STROBES.
4.	PROVIDE & INSTALL FIVE (5) EST STROBES.

INDEX	
FA-00	COVER PAGE BUILDING CLASSIFICATIONS & CODES SYSTEM TYPE AND MONITORING SCOPE OF WORK INDEX
FA-01	FIRE ALARM PLAN - SUITE# 430 MOUNTING HEIGHTS KEY MAP LEGEND
FA-02	CALCULATIONS VOLTAGE DROP CALCULATIONS BOOSTER CALCULATIONS RISER DIAGRAM & MATRIX FIRE ALARM WIRE CODE CHART
FA-03	PROPOSED GRAPHIC MAP

PROJECT:
SPEC SUITE 430
1411 S POTOMAC ST, SUITE # 430
AURORA, CO. 80012

FIRE ALARM CONTRACTOR:
PYE-BARKER FIRE & SAFETY, LLC
D.B.A. FIRE ALARM SERVICES, LLC
4800 WEST 60TH AVENUE
ARVADA, COLORADO 80003
PH: (303)466-8800
FAX: (303)466-8820

FIRE ALARM DESIGNER:
PYE-BARKER FIRE & SAFETY, LLC
D.B.A. FIRE ALARM SERVICES, LLC
4800 WEST 60TH AVENUE
ARVADA, COLORADO 80003
PH: (303)466-8800
FAX: (303)466-8820
GERAD DETWILER

OWNER/GC:
PRINCIPIA CONSTRUCTION
15350 E HINSDALE DR.
CENTENNIAL, CO 80112
PH: (720)273-7470
FAX: (720)489-8228
DANA MARTIN

ARCHITECT:
TPS TENANT PLANING SERVICES
1660 LINCOLN ST.
DENVER, CO 80110
PH: (303)861-4800
FAX: (303)861-1621



4800 WEST 60TH AVENUE PHONE: 303-466-8800
ARVADA, COLORADO 80003 FAX: 303-466-8820
FASCAD@PYEBARKERFS.COM PYEBARKERFS.COM



City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: **S Kirchner**
Date: **Oct 02, 2024**
2021 INTERNATIONAL CODES & 2023 NEC



City of Aurora Building Division
Project: **AURORA MEDICAL CENTER TI - FIRE AL**
Address: **1411 S POTOMAC ST UNIT 430**
Occupancy Group: **B**
Construction Type: **IIB-SPK**
RSN: **1843779**
Permit: **2024-2475906-LT**

COA Adopted Codes for this project:
ICC-2021 - NEC-2023
NFPA 13-2019 - NFPA 72-2019
COA Amendments 22 & 66

Provide a full size set of legible
approved construction documents
PRINTED IN COLOR
for review by the Field Inspector.

Code violations that are found during
inspection are required to be corrected.
Permit issuance does not grant
approval of a code violation.

Field Inspection consultation is available
upon request; call (303) 739-7420 to
schedule a consultation.

Raymond P. Breeland
NICET Certification #111006
Fire Alarm Systems Level III
Certification Expires 04/01/2025
Date: 09/25/2024

RAY

RSN: 1843779
Permit # 2024-2475906-LT
Phone: 303-466-8800
Fax: 303-466-8820
PYEBARKERFS.COM

PYE BARKER

FIRE & SAFETY • EST. 1946

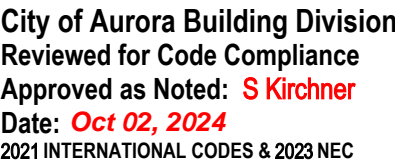
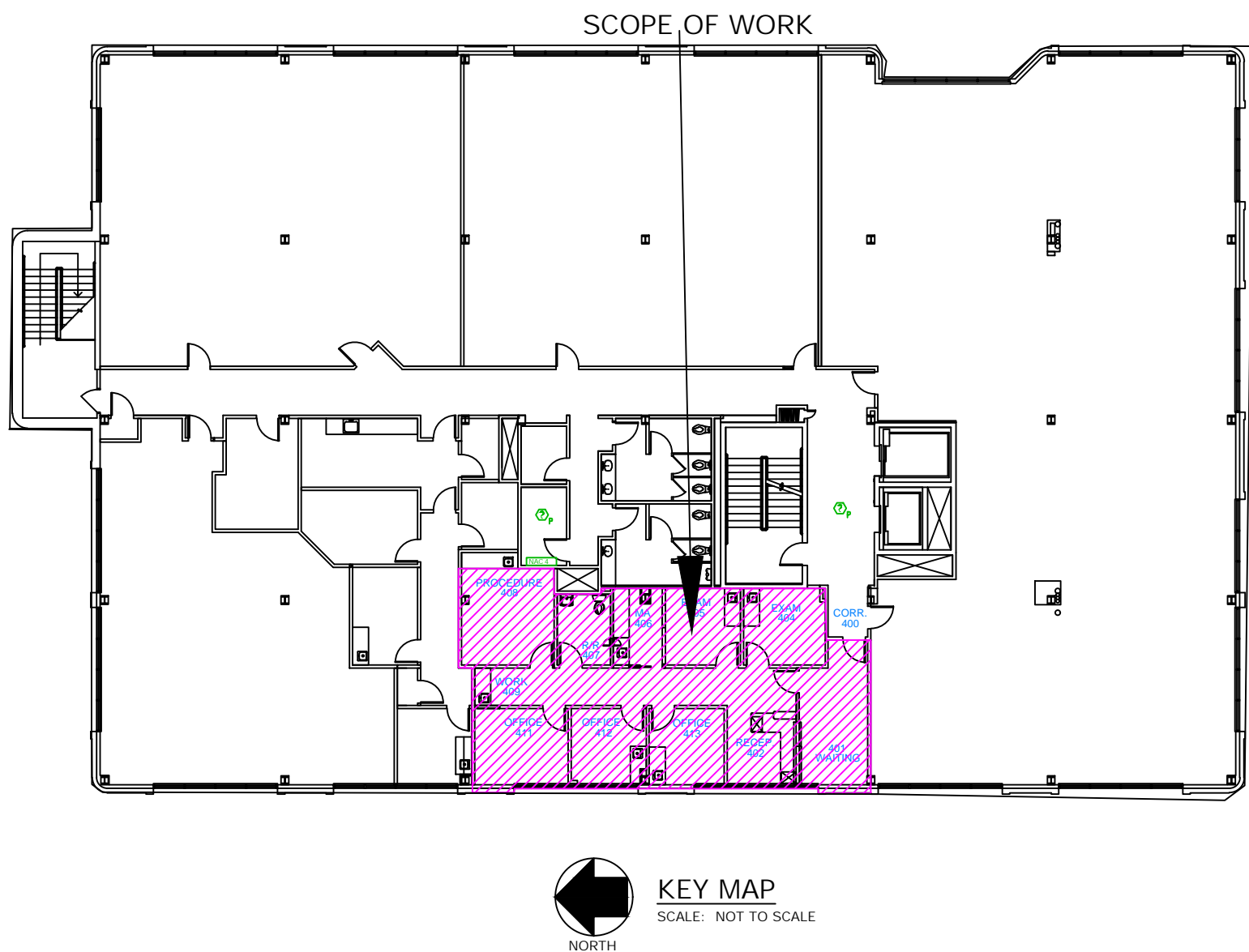
4800 WEST 60TH AVENUE
ARVADA, COLORADO 80003
FASCAD@PYEBARKERFS.COM

REVISIONS:	
DRAWN BY:	NO:
G. DETWILER	
DATE:	
9/27/2024	
APPR. BY:	

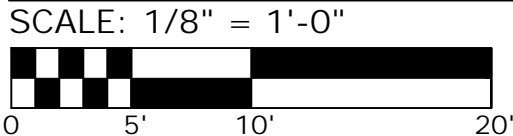
FIRE ALARM SYSTEM TENANT FINISH FOR:	
PROJECT TITLE	SPEC SUITE 430
BUILDING NAME & ADDRESS	AURORA MEDICAL CENTER 1411 S POTOMAC ST, SUITE # 430 AURORA, CO. 80012
PROJECT NUMBER	2414170

FIRE ALARM & DETECTION SYSTEM	
DRAWING TITLE:	
COVER PAGE	
SUITE # 430	
SCALE:	N/A

SHEET NUMBER	
FA-00	



The floor plan illustrates the layout of the 4th floor, featuring a central corridor and several functional rooms. The rooms are labeled in blue text: PROCEDURE 408, WORK 409, OFFICE 411, OFFICE 412, OFFICE 413, RECEPTION 402, EXAM 405, EXAM 404, CORR 406, and 401 WAITING. Security camera locations are indicated by red 'X' symbols with associated labels: NAC4-1-1, NAC4-1-2, NAC4-1-3, NAC4-1-4, NAC4-1-5, NAC4-1-6, NAC4-1-7, NAC4-1-8, NAC4-1-9, NAC4-1-10, and NAC4-1-11. The plan also shows a staircase and a large open area on the right side.

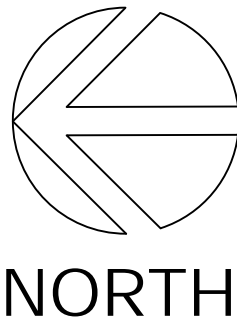
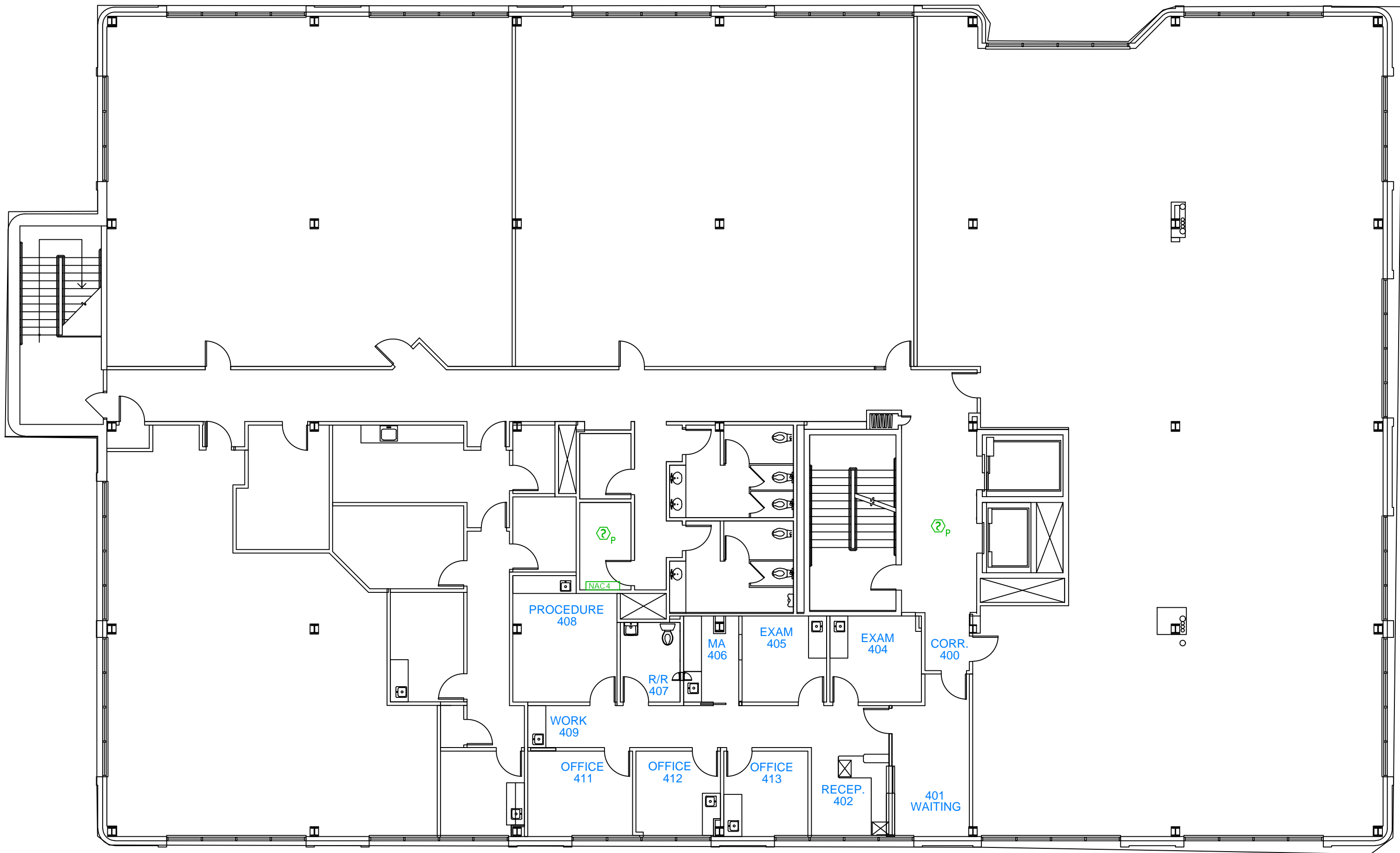


RFDU

SHEET
NUMBER
FA-01

AURORA MEDICAL CENTER

1411 S POTOMAC ST, SUITE # 430
AURORA, CO. 80012



9/27/2024

NOTE:
THIS IS A PROPOSED GRAPHIC MAP. DEVICE ADDRESSES AND UTILITY
SHUTOFF LOCATIONS TO BE ADDED UPON FIELD VERIFICATION AND
INSTALLATION OF FA SYSTEM. ALL REQUIRED INFO WILL BE ON THE
MAP PRIOR TO FINAL INSPECTION.

Raymond P. Breeland
NICET Certification #111006
Fire Alarm Systems Level III
Certification Expires 04/01/2025
Date: 09/25/2024

RPB

FIRE ALARM & DETECTION SYSTEM
DRAWING TITLE:
GMAP
SUITE # 430
SCALE: N/A

PROJECT TITLE
FIRE ALARM SYSTEM TENANT FINISH FOR:
SPEC SUITE 430
BUILDING NAME & ADDRESS
AURORA MEDICAL CENTER
1411 S POTOMAC ST, SUITE # 430
AURORA, CO. 80012
PROJECT NUMBER
2414170

DRAWN BY:	NO:	DATE:	REVISIONS:
G. DETWILER			
DATE:			
9/27/2024			
APPR. BY:			



RSN: 1843779

Permit # 2024-2475906-L1

Phone # 303-466-8800

303-466-8800

4800 WEST 60TH AVENUE

ARVADA, COLORADO 80003

FASCAD@PYEBARKERFS.COM

PYEBARKERFS.COM

Fire Alarm System Addition at:

SPEC SUITE 430
AURORA MEDICAL CENTER
1411 S. POTMAC STREET, SUITE 430
AURORA, CO. 80012



City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: **S Kirchner**
Date: **Oct 02, 2024**
2021 INTERNATIONAL CODES & 2023 NEC

Scope of Work:

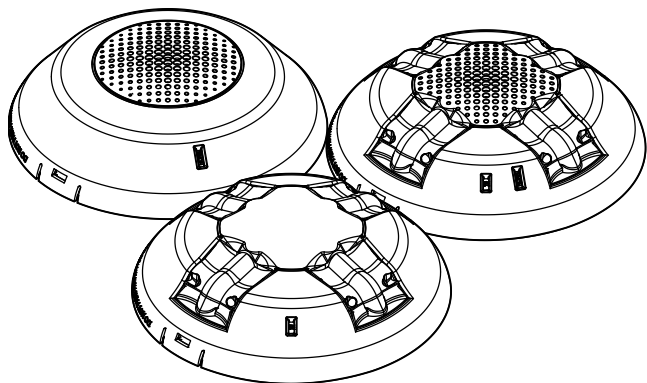
1. REPLACE ONE (1) HORN STROBE WITH EST LED.
2. PROVIDE & INSTALL ONE (1) EST HORN STROBE.
3. REPLACE FOUR (4) STROBES WITH NEW EST LED STROBES.
4. PROVIDE & INSTALL FIVE (5) EST LED STROBES.

Raymond P. Breeland
NICET Certification #111006
Fire Alarm Systems Level III
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Date: 09/25/2024

RPB

Genesis GC Series Signaling Appliance Installation Sheet



Description

Genesis GC Series horns, strobes, and horn-strobes are ceiling- or wall-mounted plug-in fire alarm signaling appliances designed for indoor dry applications. See Table 1 through Table 3 for a list of models.

Table 1: Horn models

Number	Description
GCARF	Ceiling horn, red, FIRE
GCARF-FR	Ceiling horn, red, FEU
GCARF-SP	Ceiling horn, red, FUEGO
GCARN	Ceiling horn, red, no marking
GCAWF	Ceiling horn, white, FIRE
GCAWF-FR	Ceiling horn, white, FEU
GCAWF-SP	Ceiling horn, white, FUEGO
GCAWN	Ceiling horn, white, no marking

Table 2: Strobe models

Number	Description
GCVRF	Ceiling strobe, red, FIRE
GCVRF-FR	Ceiling strobe, red, FEU
GCVRF-SP	Ceiling strobe, red, FUEGO
GCVRN	Ceiling strobe, red, no marking
GCVWF	Ceiling strobe, white, FIRE
GCVWF-FR	Ceiling strobe, white, FEU
GCVWF-SP	Ceiling strobe, white, FUEGO
GCVWN	Ceiling strobe, white, no marking

Table 3: Horn-strobe models

Number	Description
GCAVRF	Ceiling horn-strobe, red, FIRE
GCAVRF-FR	Ceiling horn-strobe, red, FEU
GCAVRF-SP	Ceiling horn-strobe, red, FUEGO
GCAVRN	Ceiling horn-strobe, red, no marking
GCAVWF	Ceiling horn-strobe, white, FIRE
GCAVWF-FR	Ceiling horn-strobe, white, FEU
GCAVWF-SP	Ceiling horn-strobe, white, FUEGO
GCAVWN	Ceiling horn-strobe, white, no marking

Genesis GC Series signaling appliances feature:

- Field-configurable horn and strobe outputs. See Figure 2.
- Enhanced synchronization circuitry to comply with the latest requirements of UL 1638 and CAN/ULC-S526.
- Input wiring test points on the front of the appliance when the cover is removed.

Note: Synchronized operation requires a separately installed synchronization device. See the control unit or remote booster/auxiliary power supply compatibility list for compatible synchronization devices.

Configuration

Caution: Equipment damage hazard. Using excessive force when removing the appliance cover may damage the cover and prevent it from latching in place.

To configure the signaling appliance:

1. Remove the appliance cover. See Figure 1.
Insert a small, flat-bladed screwdriver into the slot at the bottom of the appliance.
Gently pull up on the screwdriver to pry the bottom of the appliance cover down and away from the appliance.
Lift the bottom of the cover out and over the top of the appliance.
2. Set the light and sound output switches. See Figure 2.
3. Replace the appliance cover.



Figure 1: Removing and replacing the cover

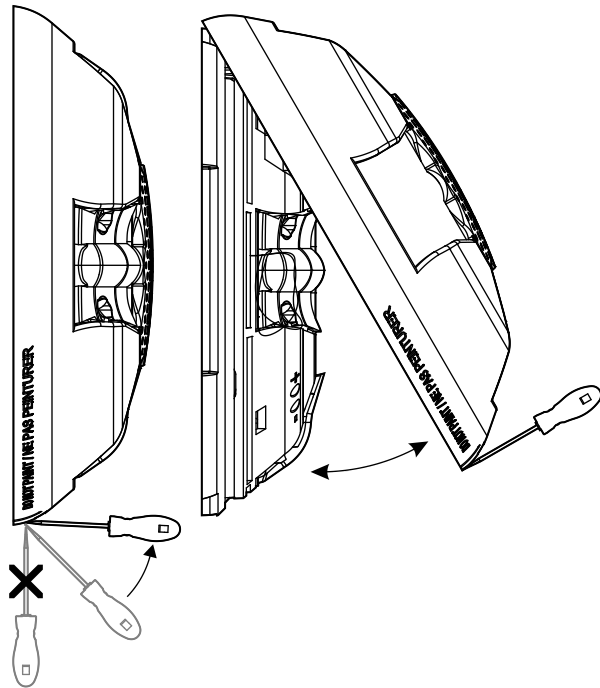
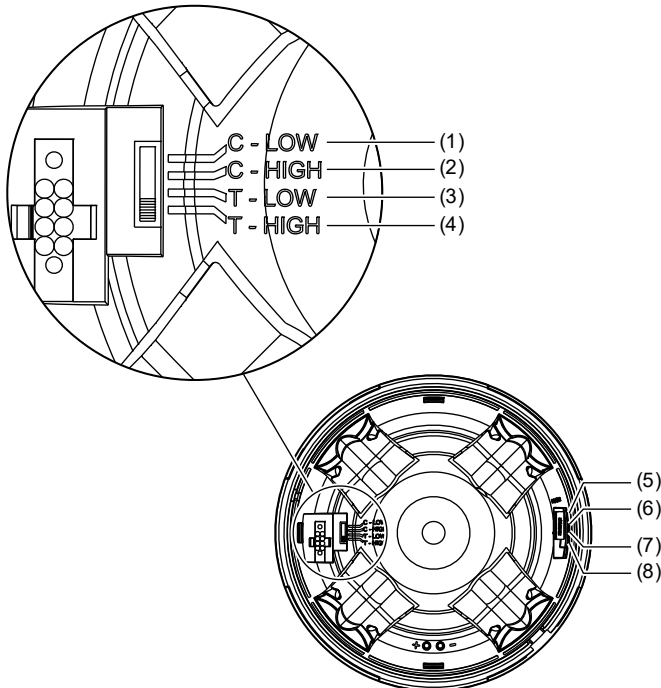


Figure 2: Light and sound output settings



- | | |
|--------------------------|-----------------|
| (1) Constant, low dB | (5) 115 candela |
| (2) Constant, high dB | (6) 75 candela |
| (3) T3 temporal, low dB | (7) 30 candela |
| (4) T3 temporal, high dB | (8) 15 candela |

Note: Temporal 3 coding is the required output for fire notification devices per NFPA 72. Any device coding other than Temporal 3 is at the discretion and approval of the local authority having jurisdiction (AHJ).

Installation

Install and wire this device in accordance with applicable national and local codes, ordinances, and regulations.

Caution: Electrical supervision requires that you break the wire run at each terminal. Do not loop the signaling circuit field wires around the terminals.

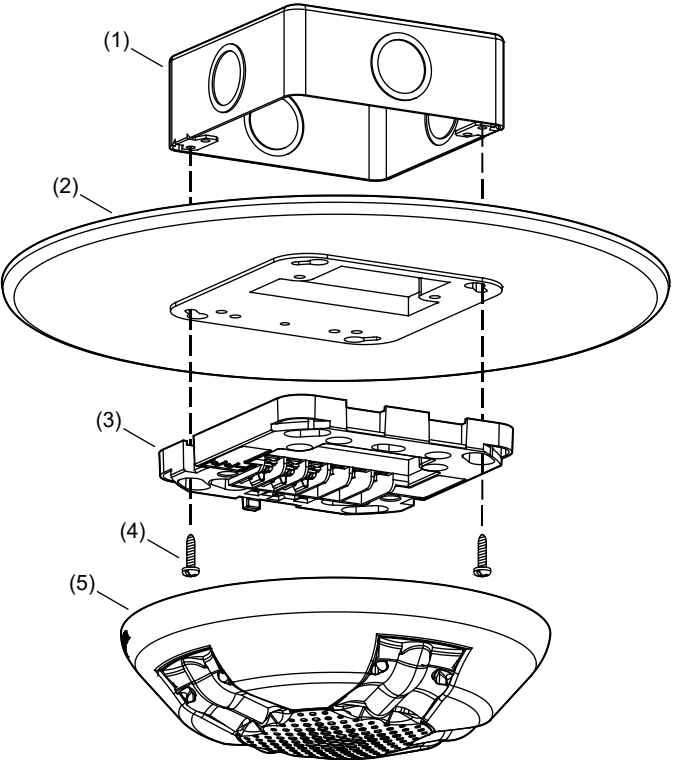
To install the appliance:

1. Attach the wiring plate and, if used, the trim plate to the electrical box. See Figure 3. The wiring plate and the trim plate are both ordered separately.
2. Connect the field wiring. Observe signal polarity for the appliance to operate properly. See Figure 4.
3. Remove the shorting clip (Figure 4, item 3). Retain for future use.
4. Plug the appliance into the wiring plate by setting the appliance on the top of the wiring plate, and then snapping the bottom into place. See Figure 5.

To unplug the appliance, press the spring clip on the bottom, and then lift the appliance away from the wiring plate.

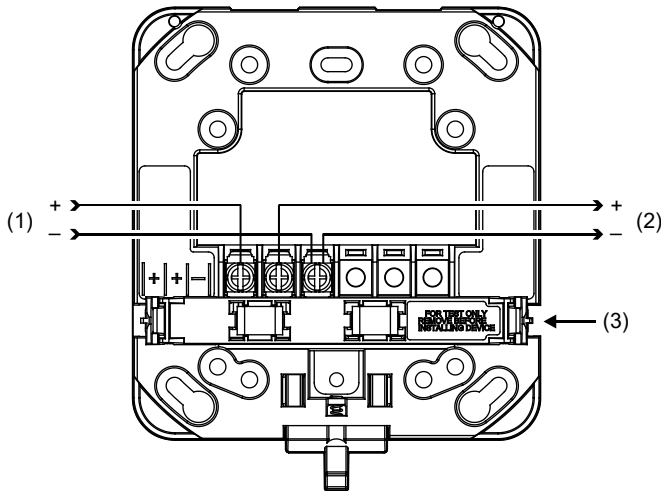
5. Test the unit for proper operation.

Figure 3: Mounting diagram



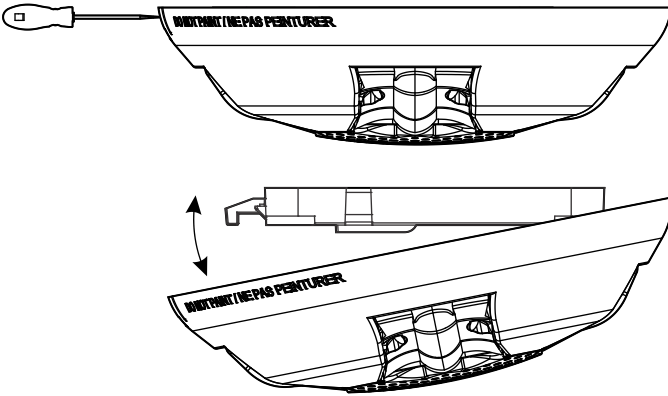
- (1) Electrical box
- (2) Trim plate (optional)
- (3) Wiring plate (required, ordered separately)
- (4) Machine screw (2X, supplied with wiring plate)
- (5) GC Series signaling appliance

Figure 4: Wiring



- (1) Horn/strobe circuit in (signal polarity shown in the active condition)
- (2) Horn/strobe circuit out
- (3) Shorting clip

Figure 5: Removing and replacing the appliance



Maintenance and testing

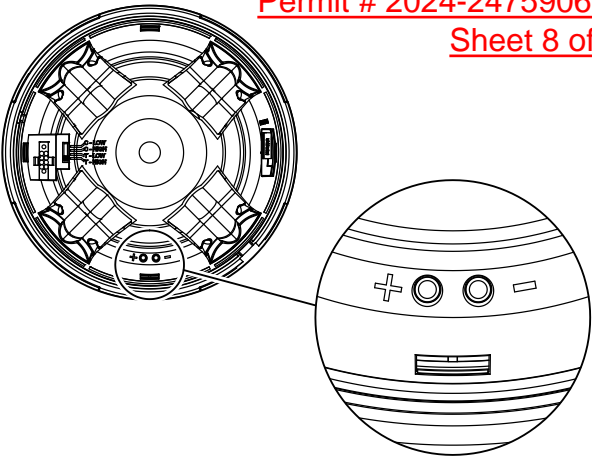
Caution: Equipment damage hazard. To maintain the required agency listings, do not change factory-applied finishes.

This unit is not serviceable or repairable. If the unit fails to operate, contact the supplier for a replacement.

Perform a visual and operational inspection in accordance with applicable codes and standards or as directed by the local authority having jurisdiction.

Input wiring test points are available on the front of the appliance when the cover is removed. The test points let you easily spot check the field circuit wiring without the need to remove the appliance from the wall. See Figure 6.

Figure 6: Test points



Note: Marking indicates signal polarity when the circuit is active.

Specifications

Operating voltage	16 to 33 VDC, 16 to 33 VFWR
Operating current	See Table 4 to Table 6
Horn signal type	Constant or T3 temporal
Sound output	See Table 7 and Table 8
Sound pattern	See Table 9 and Table 10
Light output	15, 30, 75, or 115 cd
Strobe flash rate	1 fps (flash per second) approx.
Light distribution	See Figure 7
Synchronization	20 Ω max. between any two devices. To determine allowed wire resistance, refer to these specifications, and the specifications for the synchronized signal source.
Dimensions ($\varnothing \times D$)	6.8 \times 1.82 in. (17.27 \times 4.62 cm) See Figure 8
Strobe-to-box center offset	0 in (0 cm)
Compatible electrical boxes	1-gang, 2-gang, 4-inch octagon, 4-inch square
Wiring plate	GP10 (pack of ten)
Trim rings	GCTR, GCTW
Replacement covers	See Table 11 to Table 13
Operating environment	
Temperature	32 to 122°F (0 to 50°C)
Relative humidity	0 to 93% noncondensing
Storage temperature	-40 to 158°F (-40 to 70°C)

Table 4: Operating current (horn models)

Sound setting	16 to 33 VDC	16 to 33 VFWR
C-LOW, T-LOW	20 mA	25 mA
C-HIGH, T-HIGH	30 mA	40 mA

Table 5: Operating current (strobe models)

Strobe setting	16 to 33 VDC	16 to 33 VFWR
15, 30, 75, 115	35 mA	45 mA

Table 6: Operating current (horn-strobe models)

Strobe setting	Sound setting	16 to 33 VDC	16 to 33 VFWR
15, 30, 75, 115	C-LOW, T-LOW	50 mA	60 mA
	C-HIGH, T-HIGH	60 mA	75 mA

Table 7: Sound output (horn models)

Sound setting	Reverberant (UL 464)	Anechoic (CAN/ULC-S525)
C-LOW, T-LOW	80 dBA	86 dBA
C-HIGH, T-HIGH	86 dBA	92 dBA

Table 8: Sound output (horn-strobe models)

Sound setting	Reverberant (UL 464)	Anechoic (CAN/ULC-S525)
C-LOW, T-LOW	80 dBA	86 dBA
C-HIGH, T-HIGH	86 dBA	92 dBA

Table 9: Sound pattern – horn models (ULC)

Axis	Angle (°)	Output (dBA)
Horizontal	115 and 55	93.3
Vertical	125 and 50	91.7

Table 10: Sound pattern – horn-strobe models (ULC)

Axis	Angle (°)	Output (dBA)
Horizontal	145 and 35	93.0
	155 and 25	90.8
Vertical	135 and 35	92.0
	155 and 25	85.4

Table 11: Horn replacement covers

Model	Description
GCARA-CVR	Cover, ceiling horn, red, ALERT
GCARF-CVR	Cover, ceiling horn, red, FIRE
GCARF-FR-CVR	Cover, ceiling horn, red, FEU
GCARF-SP-CVR	Cover, ceiling horn, red, FUEGO
GCARN-CVR	Cover, ceiling horn, red, no marking
GCAWA-CVR	Cover, ceiling horn, white, ALERT
GCAWF-CVR	Cover, ceiling horn, white, FIRE
GCAWF-FR-CVR	Cover, ceiling horn, white, FEU
GCAWF-SP-CVR	Cover, ceiling horn, white, FUEGO
GCAWN-CVR	Cover, ceiling horn, white, no marking

Table 12: Strobe replacement covers

Model	Description
GCVRA-CVR	Cover, ceiling strobe, red, ALERT
GCVRF-CVR	Cover, ceiling strobe, red, FIRE
GCVRF-FR-CVR	Cover, ceiling strobe, red, FEU
GCVRF-SP-CVR	Cover, ceiling strobe, red, FUEGO
GCVRN-CVR	Cover, ceiling strobe, red, no marking
GCVWA-CVR	Cover, ceiling strobe, white, ALERT
GCVWF-CVR	Cover, ceiling strobe, white, FIRE
GCVWF-FR-CVR	Cover, ceiling strobe, white, FEU
GCVWF-SP-CVR	Cover, ceiling strobe, white, FUEGO
GCVWN-CVR	Cover, ceiling strobe, white, no marking

Table 13: Horn-strobe replacement covers

Model	Description
GCAVRA-CVR	Cover, ceiling horn-strobe, red, ALERT
GCAVRF-CVR	Cover, ceiling horn-strobe, red, FIRE
GCAVRF-FR-CVR	Cover, ceiling horn-strobe, red, FEU
GCAVRF-SP-CVR	Cover, ceiling horn-strobe, red, FUEGO
GCAVRN-CVR	Cover, ceiling horn-strobe, red, no marking
GCAVWA-CVR	Cover, ceiling horn-strobe, white, ALERT
GCAVWF-CVR	Cover, ceiling horn-strobe, white, FIRE
GCAVWF-FR-CVR	Cover, ceiling horn-strobe, white, FEU
GCAVWF-SP-CVR	Cover, ceiling horn-strobe, white, FUEGO
GCAVWN-CVR	Cover, ceiling horn-strobe, white, no marking

Figure 7: Light distribution

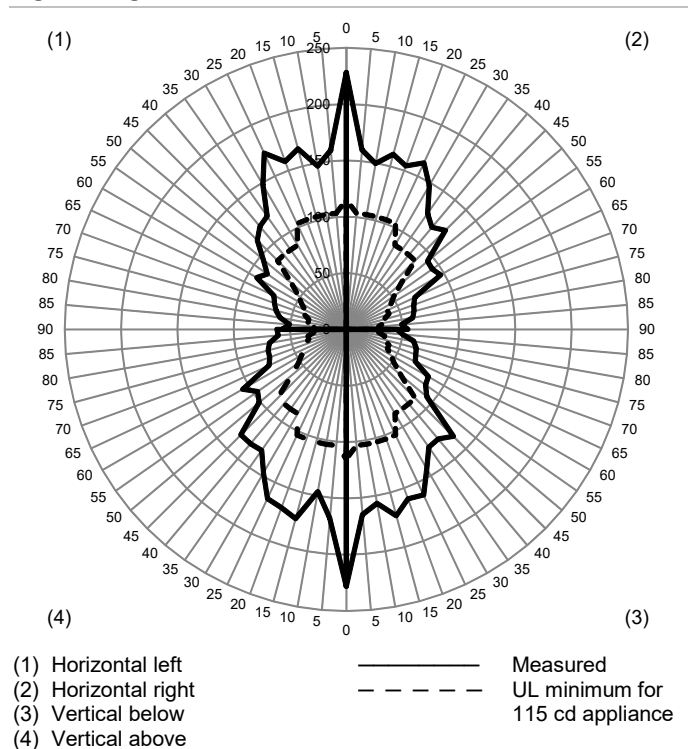
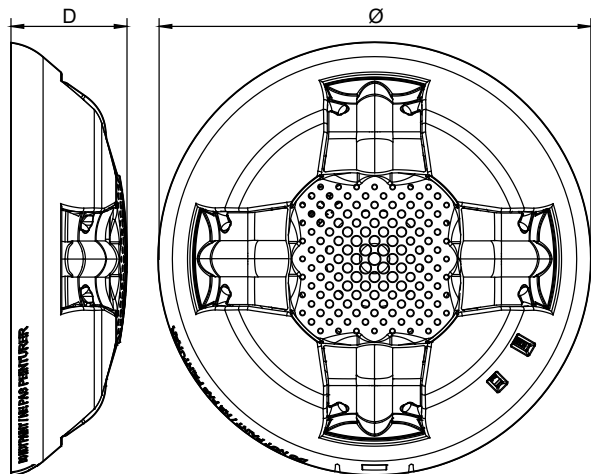


Figure 8: Dimensions



Regulatory information

UL rating	Regulated 24 DC and 24 FWR
FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Industry Canada compliance	This Class A digital apparatus complies with Canadian ICES-003.
Environmental class	Indoor, dry

Contact information

For contact information, see www.edwardsfiresafety.com.