THE MEDICAL CENTER OF AURORA - SOUTH
3RD FLOOR CENTRAL TOWER SMOKE DETECTOR ADDITION
MODIFICATION TO EXISTING FIRE ALARM SYSTEM

Johnson Controls

Johnson Controls
DISTRICT - 419
14200 E. EXPOSITION AVE
AURORA, CO 80012
SERVICE: 303-355-0500
PHONE: 303-355-0500
FAX: 303-355-0615

NICET CERTIFICATION INFORMATION
CALE RAUCH
NICET Fire Alarm, III
Certification #151588
Valid Through: 12/01/25
03/03/2025

DRAWING INDEX

Sheet List Table

Sheet Number	Sheet Title
General Information (FA-000 Series)	
FA-001	COVER SHEET
Floorplans-Riser-Typical Details (FA-100 Series)	
FA-101	3RD FLR PARTIAL DEVICE PLACEMENT PLAN, RISER, AND TYPICAL WIRING
Calculations (FA-600 Series)	
FA-601	4100 NODE 1 TRANSPONDER 1 CALCUATIONS AND SCHEDULES
Graphic Maps (FA-800 Series)	
FA-801	3RD FLOOR STATIC GRAPHIC MAP

City of Aurora Building Division
Counter Permit Authorized by: *KDarcy*
RSN: *1881024*
Permit: *2025-2513109-CT*
Date: *Mar 10, 2025*
2021 INTERNATIONAL CODES & 2023 NEC

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.

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

BUILDING/FIRE DEPT PLAN REVIEW #:

AURORA BUILDING CODES DIVISION
15151 EAST ALAMEDA PARKWAY, 2ND FLOOR PERMIT CENTER
AURORA, COLORADO 80012
(303) 739-7420

GENERAL NOTES

1. THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS IS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
2. SHOULD ANY CONDITIONS EXIST THAT DIFFER FROM WHAT IS INDICATED ON THESE DRAWINGS WHICH CAUSE MAJOR DEVIATIONS IN THE WORK SHOWN, THE CONTRACTOR SHALL CONTACT JOHNSON CONTROLS IN A TIMELY MANNER SO AS NOT TO IMPAIR THE CONSTRUCTION SCHEDULE.
3. CONTRACTOR IS RESPONSIBLE FOR MAKING AND OBTAINING APPROVAL FOR ALL NECESSARY ADJUSTMENTS IN CIRCUITING AS REQUIRED TO ACCOMMODATE THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE AFFECTED BY ANY AUTHORIZED CHANGE. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
4. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION.
5. THE POWER CIRCUIT TO THE FACP AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED 120V, 20A BRANCH CIRCUIT BREAKER, AND SHALL HAVE A RED MARKING, LOCK-ON PROVISION AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT DISCONNECT MEANS (CIRCUIT BREAKER) SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
6. UPDATE THE AS-BUILT DRAWING SET DAILY WITH JOB PROGRESS. RETURN THE AS-BUILT DRAWING SET TO JOHNSON CONTROLS NO LATER THAN 7 DAYS AFTER FINAL TEST.
7. THE CONTRACTOR WILL MAINTAIN ALL AREAS OF THE BUILDING IN A NEAT AND WORKMANLIKE MANNER.
8. DO NOT APPLY POWER EXCEPT IN THE PRESENCE OF A FACTORY TRAINED JOHNSON CONTROLS TECHNICAL REPRESENTATIVE.
9. ANY SMOKE DETECTOR HEAD INSTALLED BEFORE THE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST. ANY FALSE ALARMS DUE TO DIRT CONTAMINATED HEADS SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM INSTALLER.
10. THE FIRE ALARM INSTALLER WILL MAINTAIN THE FIRE RESISTANCE INTEGRITY OF ALL WALL, CEILING, AND ROOF ASSEMBLIES ANY TIME THAT WORK IS NOT ACTIVELY BEING PERFORMED.
11. INSTALLATION OF DEVICES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. POWER LIMITED AND NON-POWER LIMITED FIELD WIRING MUST BE INSTALLED WITHIN THE FACP ENCLOSURE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPLICABLE ELECTRICAL CODES. REFER TO APPLICABLE CODES & STANDARDS FOR SPECIFIC CODE REFERENCES.
12. ALL WIRING SHALL BE INSTALLED ACCORDING TO APPLICABLE ELECTRICAL CODES.
13. FIRE ALARM CIRCUITS SHALL BE IDENTIFIED IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES. MARK ALL FIRE ALARM WIRES IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODE SECTIONS FOR POWER LIMITED AND NON-POWER LIMITED WIRE.
14. FIRE ALARM CABLE INSTALLED IN DUCTS, PLENUM, AND OTHER SPACES USED FOR ENVIRONMENTAL AIR SHALL BE TYPE FPLP.
15. FIRE ALARM CABLE INSTALLED IN THE VERTICAL RUNS AND PENETRATING MORE THAN ONE FLOOR OR CABLES INSTALLED IN VERTICAL RUNS IN SHAFTS SHALL BE TYPE FPLR.
16. FIRE ALARM CABLE INSTALLED IN UNDERGROUND CONDUIT OR OTHER WET LOCATIONS SHALL BE UL LISTED FOR WET LOCATIONS.
17. FIRE ALARM CIRCUITS EXTENDING BEYOND ONE BUILDING AND RUN OUTDOORS SHALL BE INSTALLED IN ACCORDANCE APPLICABLE ELECTRICAL CODES, WHERE APPLICABLE.
18. ALL WIRING, INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
19. ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FULL LENGTH OF THE WIRE.
20. ONLY SYSTEM WIRING CAN BE RUN IN THE SAME CONDUIT.
21. 120VAC IS NOT PERMITTED IN THE SAME CONDUIT WITH LOW VOLTAGE WIRING.
22. MAINTAIN MAXIMUM CONDUIT FILL RATIO AS PER APPLICABLE ELECTRICAL CODES REQUIREMENTS.
23. EXISTING CONDUITS MAY BE USED BY THE INSTALLATION CONTRACTOR AS DEEMED NECESSARY; HOWEVER, ANY EXISTING CONDUIT WILL BE USED ONLY IF CONDUITS MEET CURRENT STANDARDS AND CODES. JOHNSON CONTROLS MAKES NO STATEMENTS WRITTEN OR VERBAL AS TO THE CONDITION OF EXISTING CONDUITS.

IMPORTANT NOTICE TO USER: This information may not be sold or transferred to any third party, used on other projects or additions to the project for which it was prepared, or used for completion of this project by any third party. Johnson Controls disclaims all liability for the use or reuse of altered files by the user or any third party and such use will be a user's sole risk. User shall, to the fullest extent permitted by law, defend, indemnify, and hold Johnson Controls harmless from any and all claims for loss, damage or injury arising directly or indirectly from any such unauthorized use.

LEGENDS

FIRE ALARM SYMBOL LEGEND

QTY	SYMBOL	DESCRIPTION	BRAND / MODEL	BACKBOX	WIRE TYPE(S)
		INITIATING DEVICES			
4N	②	SMOKE SENSOR, ADDRESSABLE, PHOTOELECTRIC W/ STANDARD BASE, ADDRESSABLE	4098-9714 HEAD 4098-9792 BASE	4" OCT, 1-1/2" D	M

GENERAL NOTES:
1. THE INFORMATION OR SYMBOLS SHOWN IN BOLD LINETYPE ARE NEW OR MODIFIED.
2. THE INFORMATION OR SYMBOLS SHOWN IN LIGHT LINETYPE ARE EXISTING TO REMAIN.

FIRE ALARM WIRE LEGEND

CIRCUIT DESCRIPTION		CONSTRUCTION	GAUGE	CIRCUIT PROPERTIES	ACCEPTABLE CABLE TYPES: FPLR	FPLP	THHN	TFFN	OUTDOOR + C.I.
M	IDNET	UTP SOLID	18 AWG	0.60µF MAX TOTAL LINE CAPACITANCE	X	X			

CONDUIT SIZE	MAX CONDUCTOR AREA	CONDUIT SIZE	MAX CONDUCTOR AREA
1/2"	0.122 SQ. INCH*	1-1/4"	0.596 SQ INCH*
3/4"	0.213 SQ INCH*	1-1/2"	0.814 SQ INCH*
1"	0.346 SQ INCH*	2"	1.342 SQ INCH*

* 40% CONDUIT FILL PER N.E.C.
UTP = UNSHIELDED TWISTED PAIR

ITEMS SUCH AS CAPACITANCE BETWEEN CONDUCTORS AND WIRE GAUGE CAN BE CRUCIAL TO THE CIRCUIT DESIGN OF THIS SYSTEM INSTALLATION. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR SELECTING AND INSTALLING CABLE MANUFACTURER AND MODEL THAT MEETS OR EXCEEDS THE ABOVE REQUIREMENTS. RECOMMENDED CABLE MANUFACTURERS AND MODEL NUMBERS ARE AVAILABLE UPON REQUEST.

BUILDING/FIRE DEPT GENERAL NOTES

- FIRE ALARM SYSTEMS CANNOT BE COMBINED WITH BURGLAR ALARM SYSTEMS.
- THE INSTALLER IS REQUIRED TO COORDINATE WITH THE MECHANICAL CONTRACTOR TO DETERMINE INSTALLATION OF SMOKE DETECTORS OR SENSORS (i.e., NOT CLOSER THAN 3 FEET FROM ANY SUPPLY/RETURN DIFFUSER AND THAT ADDITIONAL DETECTION MAY BE REQUIRED DUE TO THE RELOCATION OR SPACING ADJUSTMENT OF DETECTORS, AS A RESULT).
- FIRE ALARM DEVICES MUST BE PLACED IN PROTECTED AREAS WITH AMBIENT TEMPERATURE RANGING FROM 32 DEGREES TO 120 DEGREES F.
- DO NOT PLACE SMOKE DETECTORS WITHIN 3 FEET OF AIR SUPPLY REGISTERS AND DIFFUSERS.
- FIRE ALARM SYSTEM SHALL BE MONITORED BY A CLASS 1 CENTRAL STATION.
- FIRE ALARM CONTROL PANEL WILL BE PLACED IN THE LOCATION SPECIFIED WITHIN THE PLAN SUBMITTAL UNLESS APPROVED BY THE LIFE SAFETY FIELD INSPECTOR.
- CITY OF AURORA BUILDING CODES DIVISION DOES NOT GRANT APPROVAL FOR ANY VIOLATIONS OF ADOPTED FIRE CODE. CODE VIOLATIONS UNCOVERED DURING FIELD INSPECTIONS MUST BE CORRECTED.
- PER THE IFC AND THE NEC THE INSTALLER MUST REQUEST A ROUGH WIRING INSPECTION IN THE FIRE ALARM SYSTEM PRIOR TO REQUESTING A FIRE ALARM FINAL INSPECTION.
- THE CONTRACTOR SHALL CONDUCT A "PRE-TEST" OF THE PROJECT AREA PRIOR TO SCHEDULING AN ACCEPTANCE TEST WITH THE BUILDING CODES DIVISION.
- REMOTE ALARM INDICATORS SHALL BE PROVIDED FOR ANY AUTOMATIC FIRE ALARM DETECTOR LOCATED IN A CONCEALED LOCATION WITH A NORMALLY LOCKED DOOR.
- AT THE TIME OF FINAL FIRE ALARM INSPECTION, THE SYSTEM MUST BE SUPERVISED/MONITORED BY A CLASS 1 CENTRAL MONITORING AGENCY.
- THE INSTALLING CONTRACTOR (OR DESIGNEE) MUST PROVIDE ALL NECESSARY TESTING EQUIPMENT AND PERFORM ALL TESTING REQUIRED BY THE LIFE SAFETY FIELD INSPECTOR.
- IN-DUCT SMOKE DETECTORS INSTALLED IN CONCEALED LOCATIONS OR, WHERE THE DETECTOR'S ALARM INDICATOR IS NOT READILY VISIBLE TO RESPONDING PERSONNEL SHALL BE PROVIDED WITH A REMOTE INDICATOR(S), REMOTE TEST STATION AND PLACARDING.
- ALL NEW OR EXISTING FIRE ALARM SYSTEMS MUST BE CONNECTED ANY EXTERIOR HORN AND STROBE APPLIANCE. IF THE BUILDING IS FIRE SPRINKLED, A GENERAL ALARM ACTIVATION AT THE FIRE ALARM CONTROL PANEL WILL ACTIVATE THE EXTERIOR HORN AND STROBE. SILENCING THE PANEL MUST ALLOW THE VISUAL DEVICE TO CONTINUE UNTIL THE PANEL IS RESET.
- FIRE ALARM SYSTEMS SHALL INCLUDE BOTH AUDIBLE AND VISUAL ALARMS. VISUAL ALARMS WILL BE REQUIRED IN ALL ACCESSIBLE PUBLIC AND COMMON-USE AREAS PER THE IFC AND THE ANSI A117.1 STANDARD.
- PROVIDE A PRIMARY AND SECONDARY POWER SUPPLY FOR THE FIRE ALARM SYSTEM PER THE IFC, SECTION 907 AND THE NFPA 72.
- FIELD INSPECTION CONSULTATION IS AVAILABLE UPON REQUEST. CALL 303-739-7420 TO REQUEST CONSULTATION.
- THE FIRE ALARM CONTRACTOR MUST COMPLETE THE NFPA 72 "RECORD OF COMPLETION" PRIOR TO SCHEDULING THE AHJ ACCEPTANCE TEST.
- AUDIBLE ALARM SIGNALING DEVICES SHALL EXCEED THE PREVAILING SOUND LEVEL IN A ROOM OR SPACE BY 15 DBA. SOUND LEVELS FOR ALARM SIGNALS SHALL BE 120 DBA MAXIMUM. IFC SECTION 907.

APPLICABLE CODES & STANDARDS

JURISDICTIONS WITHIN THE STATE MAY HAVE AMENDMENTS TO THE STATE ADOPTED CODE. CHECK WITH THE LOCAL JURISDICTION AUTHORITY FOR MORE DETAILS.

INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION
INTERNATIONAL FIRE CODE (IFC), 2021 EDITION
NATIONAL ELECTRIC CODE (NFPA 70), 2023 EDITION
NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72), 2019 EDITION
LIFE SAFETY CODE (NFPA 101), 2012 (STATE) EDITION
ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, 2017 EDITION
ADA STANDARDS FOR ACCESSIBLE DESIGN, 2023 EDITION
COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT - HOSPITAL LICENSING RULES, 2021 EDITION

OCCUPANCY TYPE(S):
I-2 INSTITUTIONAL GROUP - CONDITION 2

SPRINKLER PROTECTION:
BUILDING IS FULLY SPRINKLERED

AREA:
TOTAL: APPROX. 450,000 SQ. FT.
SCOPE: APPROX. 140 SQ. FT.

STORIES
TOTAL:6 STORIES + BASEMENT
SCOPE: PARTIAL THIRD FLOOR

CONSTRUCTION:
TOTAL: EXISTING TYPE 1A

JOHNSON CONTROLS CONTACTS

Sales Representative
TAYLOR BOGGIO
TAYLOR.BOGGIO@JCI.COM
PHONE: (720) 360-8381

Project Manager
JASON ROMERO
JASON.ROMERO@JCI.COM
PHONE:303-349-9483

Drawings Prepared By
SAMUEL L. TULIPANA
SAMUEL L. TULIPANA@JCI.COM
PHONE: CONTACT P.M.

Drawings Checked By
AMANDA WILHELM
AMANDA.MONETTE.WILHELM@JCI.COM
NICET II #152549, EXP. 06/01/2026

Drawings Reviewed By
CALE RAUCH
CALE.RAUCH@JCI.COM
NICET III #151588, EXP. 12/01/2025

SCOPE OF WORK

MODIFY EXISTING FIRE ALARM SYSTEM: PROVIDE NEW DEVICES AS SHOWN ON DRAWINGS.

SCOPE OF WORK TO INCLUDE SMOKE DETECTORS TO BE ADDED PER CUSTOMER / CONTRACTOR REQUEST TO BRING THE AREA UP TO THE CODES AND STANDARDS OF THE MEDICAL CENTER OF AURORA LOCATED AT 1501 SOUTH POTOMAC STREET, AURORA, COLORADO 80012. NO ARCHITECTURE IS BEING MODIFIED.

(4) NEW SMOKE DETECTORS IN ADDRESSABLE STANDARD BASES TO BE INSTALLED IN (4) NEW LOCATIONS WITHIN THE CENTRAL TOWER ICU AREA.

NEW DETECTION TO TIE TO EXISTING M7 CIRCUIT OF THE EXISTING 4100 NODE-1 TRANSPONDER 1 LOCATED IN STORAGE 2-0349.

EXISTING STATIC GRAPHIC MAP FOR THE 3RD FLOOR TO RECEIVE INITIATION UPDATES.

NEW DEVICES TO FOLLOW EXISTING SEQUENCE OF OPERATIONS (SOO); NO FURTHER CHANGES TO OCCUR.

ALL NEW WIRING TO BE CLASS B.

THE EXISTING FIRE ALARM SYSTEM SHALL NOT BE DISCONNECTED OR TAKEN OUT OF SERVICE WITHOUT WRITTEN PERMISSION FROM THE OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER THE TIMING OF ANY EXISTING FIRE ALARM SYSTEM DEMOLITION WORK.

AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUUS UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY THE OWNER.

PROJECT DIRECTORY

Site
THE MEDICAL CENTER OF AURORA - SOUTH
1501 SOUTH POTOMAC STREET
AURORA, COLORADO 80012

Owner
HEALTH ONE
4900 SOUTH MONACO STREET
AURORA, COLORADO 80012
PHONE: 303-873-5511

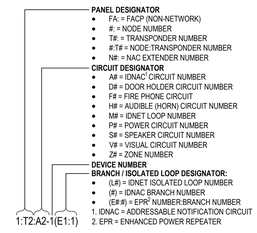
Johnson Controls District - 419
14200 E. EXPOSITION AVE
AURORA, CO 80012
PHONE: 303-355-0500
FAX: 303-355-0615
SERVICE: 303-355-0500

Installer
HARRIS ELECTRIC
11130 HERRING ROAD
COLORADO SPRINGS, COLORADO 80908
PHONE: 719-728-0555

ABBREVIATIONS LEGEND

AC = ABOVE CEILING
AFF = ABOVE FINISHED FLOOR
AHJ = AUTHORITY HAVING JURISDICTION
ALM = ALARM
ANN = ANNUNCIATOR
BMS = BUILDING MANAGEMENT SYSTEM
C = CEILING MOUNTED
CD = CANDELA RATING
DET = DETECTOR
DGP = DATA GATHERING PANEL
E = EXISTING TO REMAIN
EOL = END OF LINE
EPO = EMERGENCY POWER OFF
ER = ELEVATOR RECALL
FAA = FIRE ALARM ANNUNCIATOR
FACP = FIRE ALARM CONTROL PANEL
FATC = FIRE ALARM TERMINAL CABINET
FBO = FURNISHED BY OTHERS
FCC = FIRE COMMAND CENTER
FSD = FIRE SMOKE DAMPER
FTR = FIRE ALARM TRANSPONDER
H = HIGH HUMIDITY
HT = HEIGHT
HVAC = HEATING VENTILATION & AIR CONDITIONING
IMS = INFORMATION MANAGEMENT SYSTEM
MAX = MAXIMUM
MIN = MINIMUM
N = NEW DEVICE
NAC = NOTIFICATION APPLIANCE CIRCUIT
NDU = NETWORK DISPLAY UNIT
NEC = NATIONAL ELECTRIC CODE
NFPA = NATIONAL FIRE PROTECTION ASSOCIATION
NIC = NOT IN CONTRACT
NPU = NETWORK PROCESSING UNIT
N.T.S. = NOT TO SCALE
PAP = PRE-ACTION PANEL
RC = EXISTING TO REMOVE AND COVER
RD = EXISTING DEVICE TO BE RELOCATED
RL = RELOCATED DEVICE
RR = REMOVE EXISTING & REPLACE WITH NEW
SCC = STATUS COMMAND CENTER
SLC = SIGNALING LINE CIRCUIT
SMK = SMOKE
SUPV = SUPERVISORY
TAC = TRUEALERT ADDRESSABLE CONTROLLER
TOS = TOP OF SHAFT
TRBL = TROUBLE
TS = TAMPER SWITCH
TYP = TYPICAL
UON = UNLESS OTHERWISE NOTED
VCC = VOICE COMMAND CENTER
VT = VALVE TAMPER
W = WATTAGE
W/ = WITH
W/O = WITHOUT
WF = WATERFLOW
WG = WIRE GUARD
WP = WEATHERPROOF
XP = EXPLOSION PROOF

DEVICE TAG LEGEND



EXISTING SYSTEM SEQUENCE OF OPERATIONS

M.C.O.A. SOUTH TOWER	SYSTEM OUTPUTS																									
	FACP Annunciation					Notification						Required Controls										Supplementary				
SEQUENCE OF OPERATIONS	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE COMMON TROUBLE SIGNAL	ACTUATE EVACUATION SIGNALS (AUDIBLE/VISUAL'S)	ACTUATE SPRINKLER BELL	DISPLAY CHANGE OF STATUS AT REMOTE ANNUNCIATOR	TRANSMIT FIRE ALARM SIGNAL TO OFF-SITE REPORTING	TRANSMIT SUPERVISORY SIGNAL TO OFF-SITE REPORTING	TRANSMIT TROUBLE SIGNAL TO OFF-SITE REPORTING	NOTIFY HOSPITAL PBX	FAN SHUT DOWN	DAMPER SHUT DOWN	DOOR HOLD MAG LOCK RELEASE	RELEASE DOP/DOOR FIRE DOORS	RELEASE ASSOCIATED ROLL-UP DOOR	ELEVATOR SHUT DOWN (1)	ELEVATOR RECALL - MAIN FLOOR	ELEVATOR RECALL - ALTERNATE FLOOR	ELEVATOR HAT FLASH	OVERRIDE MUSIC SYSTEM	SILENCE AUDIBLE SIGNAL ONLY, VISUALS TO REMAIN	ACTUATE OUTSIDE HORN/STROBE (ON GENERAL ALARM)	RESET PANEL TO "NORMAL" CONDITION	
SYSTEM INPUTS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
1 SMOKE DETECTOR	X	X					X		X	X				X	X	X	X						X		X		1
2 SMOKE DETECTOR AT 2ND, 4TH & 5TH FLR CLERK DESK	X	X					X		X	X				X		X	X	X					X		X		2
3 SMOKE DETECTOR AT SMOKE PARTITION	X	X					X		X	X				X		X	X						X		X		3
4 MANUAL PULL STATION	X	X					X		X	X						X	X						X		X		4
5 HEAT DETECTOR	X	X					X		X	X						X	X						X		X		5
6 DUCT DETECTOR			X	X					X		X			X	X												6
7 DUCT DETECTOR AT F/S DAMPER			X	X					X		X				X												7
8 MAIN FLR. ELEV. LOBBY SMOKE DETECTOR	X	X					X		X	X				X	X	X	X	X			X	X	X		X		8
9 ELEV. LOBBY SMOKE DETECTORS (EXCL. MAIN FLR.)	X	X					X		X	X				X		X	X		X				X		X		9
10 ELEV. MECH. ROOM SMOKE DETECTOR	X	X					X		X	X				X		X		X		X			X		X		10
11 ELEV. SHAFT HEAT DETECTOR	X	X					X		X	X						X			X								11
12 ELEV. MECH. ROOM HEAT DETECTOR	X	X					X		X	X						X			X								12
13 WATERFLOW SWITCH	X	X					X	X	X	X						X								X		X		13
14 TAMPER SWITCH			X	X						X		X															14
15 POST INDICATOR VALVE SWITCH			X	X						X		X															15
16 FACP AC POWER FAILURE					X	X							X														16
17 FACP LOW BATTERY					X	X							X														17
18 OPEN CIRCUIT					X	X							X														18
19 GROUND FAULT					X	X							X														19
20 NOTIFICATION APPLIANCE CIRCUIT SHORT					X	X							X														20
21 ALARM SIGNAL SILENCE																								X			21
22 SYSTEM RESET																										X	22
23 CATH LAB BUILDING ALARM	X	X							X				X														23
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	

NOTE: Audible Evacuation Signal shall be Temporal Pattern per NFPA 72.

- *Disconnect power after a time delay equal to the time it takes for the car to travel from the highest to the lowest level plus 10 seconds.*

New devices to follow existing Sequence of Operations; no further changes to occur.

ISSUE LOG					
MARK	DATE	CAD	CHK	DESCRIPTION	Revisions shown with Δ symbol

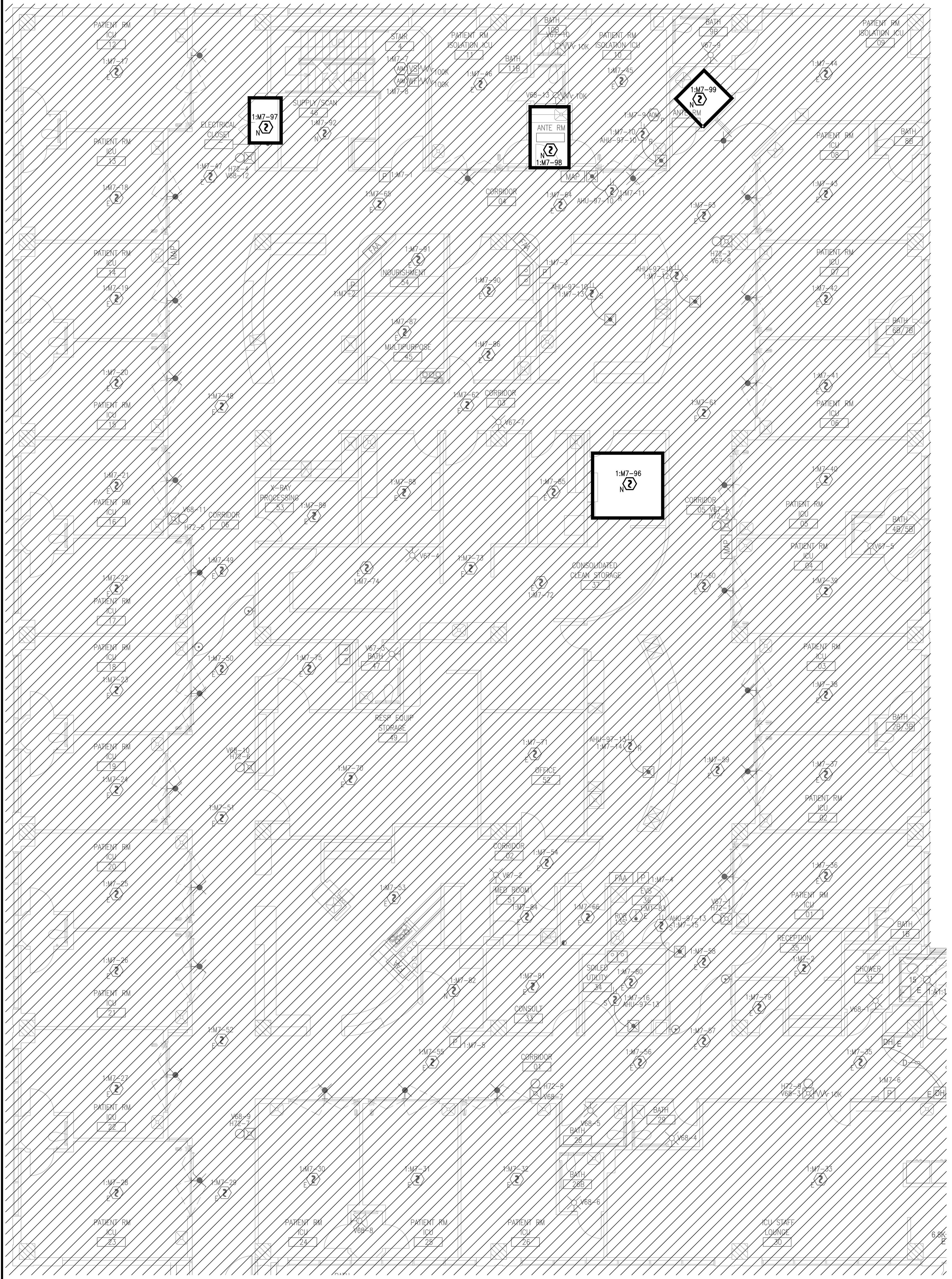
THE MEDICAL CENTER OF AURORA - SOUTH
3RD FLOOR CENTRAL TOWER SMOKE DETECTOR ADDITION
THE MEDICAL CENTER OF AURORA - SOUTH
1501 SOUTH POTOMAC STREET
AURORA, COLORADO 80012

FOR PERMIT

DRAWN BY:	SLT
CHECKED BY:	CBR
ISSUE DATE:	2/25/25
JOB #:	
PROJECT #:	419:650606860
JOHNSON CONTROLS © 2025	
SYSTEM:	FIRE ALARM SYSTEM
SHEET:	COVER SHEET
	FA-001

© Johnson Controls 2025. All rights reserved. Reuse, copying, modification or alteration of the drawings and other information contained herein is strictly prohibited.

FILE PATH: C:\Users\jtaurich\OneDrive - Johnson Controls\Medical Center of Aurora\1501 S Potomac - Aurora South\South Tower - Node 1\AB-3rd ICU Coverage - 2025 - 650606860\Fire\FA-001.dwg
LAST SAVED BY: JTAURICH
LAST PRINTED: 3/3/2025 4:20:26 PM
30" x 42" - Arch E1 Size



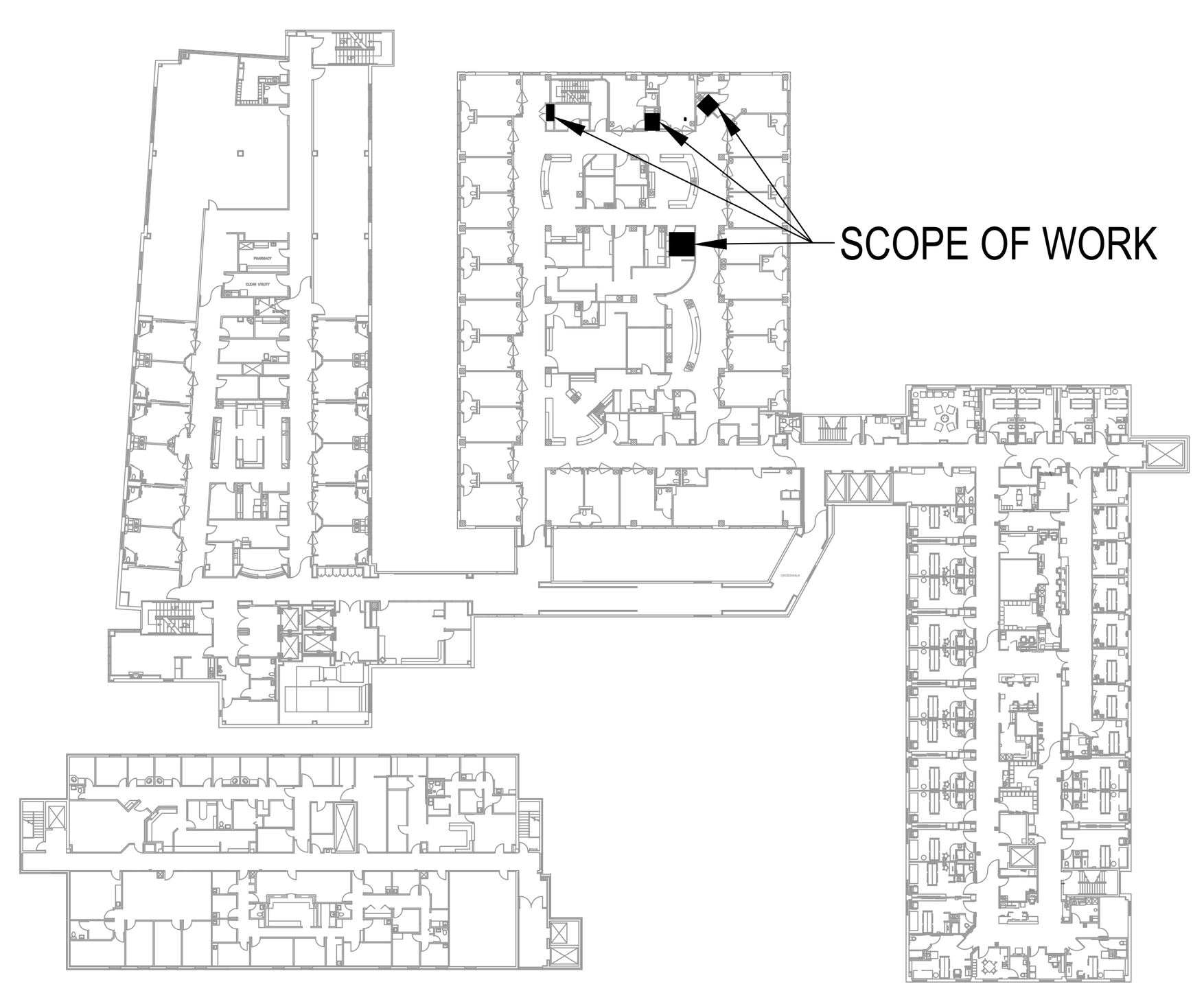
3RD FLOOR PARTIAL DEVICE PLACEMENT PLAN

SCALE:1/8" = 1'-0"

SCALE:1/8" = 1'-0" IN FEET 0 4' 8' 16'

GENERAL NOTES:

1. ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.
2. THE DEVICE ADDRESSES INDICATED ON THESE DRAWINGS ARE AN ALPHANUMERIC DESCRIPTION OF WHICH CIRCUIT THE DEVICE IS LOCATED ON. DEVICES MAY BE ASSIGNED A DIFFERENT NUMBER WITHIN THE PANEL PROGRAM. CONSULT WITH A JOHNSON CONTROLS TECHNICIAN BEFORE APPLYING A PHYSICAL LABEL TO ANY DEVICES.
3. THE INFORMATION OR SYMBOLS SHOWN IN BOLD LINETYPE ARE NEW OR MODIFIED.
4. THE INFORMATION OR SYMBOLS SHOWN IN LIGHT LINETYPE ARE EXISTING TO REMAIN.
5. ALL ITEMS THAT ARE HATCHED ARE NOT IN THIS SCOPE OF WORK.
6. ALL DEVICES ADDED IN THIS SCOPE OF WORK ARE TO COMPLETE THE SPACE PER CODES AND STANDARDS.
7. ALL NEW SMOKE DETECTORS ARE LISTED FOR UL 6TH EDITION.



3RD FLOOR KEYPLAN

SCALE:1/8" = 1'-0"



3RD FLOOR PARTIAL RISER DIAGRAM

SCALE:N.T.S.

RISER NOTES:

1. RISER IS A DIAGRAMMATICAL REPRESENTATION OF THE SYSTEM ARCHITECTURE IN BUILDING CROSS SECTION. IT IS NOT INTENDED TO REPRESENT ACTUAL WIRE RUNS, PANEL CONFIGURATIONS OR PENETRATIONS. REFER TO FLOOR PLANS AND PANEL DETAILS FOR CIRCUIT ROUTING AND CONFIGURATION INFORMATION.
2. ALL WIRING SHALL COMPLY WITH APPLICABLE ELECTRICAL CODES. REFER TO 'APPLICABLE CODES & STANDARDS' ON SHEET FA-001 FOR SPECIFIC CODE REFERENCES.
3. THE INFORMATION OR SYMBOLS SHOWN IN BOLD LINETYPE ARE NEW OR MODIFIED.
4. THE INFORMATION OR SYMBOLS SHOWN IN LIGHT LINETYPE ARE EXISTING TO REMAIN.
5. ALL ITEMS THAT ARE HATCHED ARE NOT IN THIS SCOPE OF WORK.

KEYED NOTES:

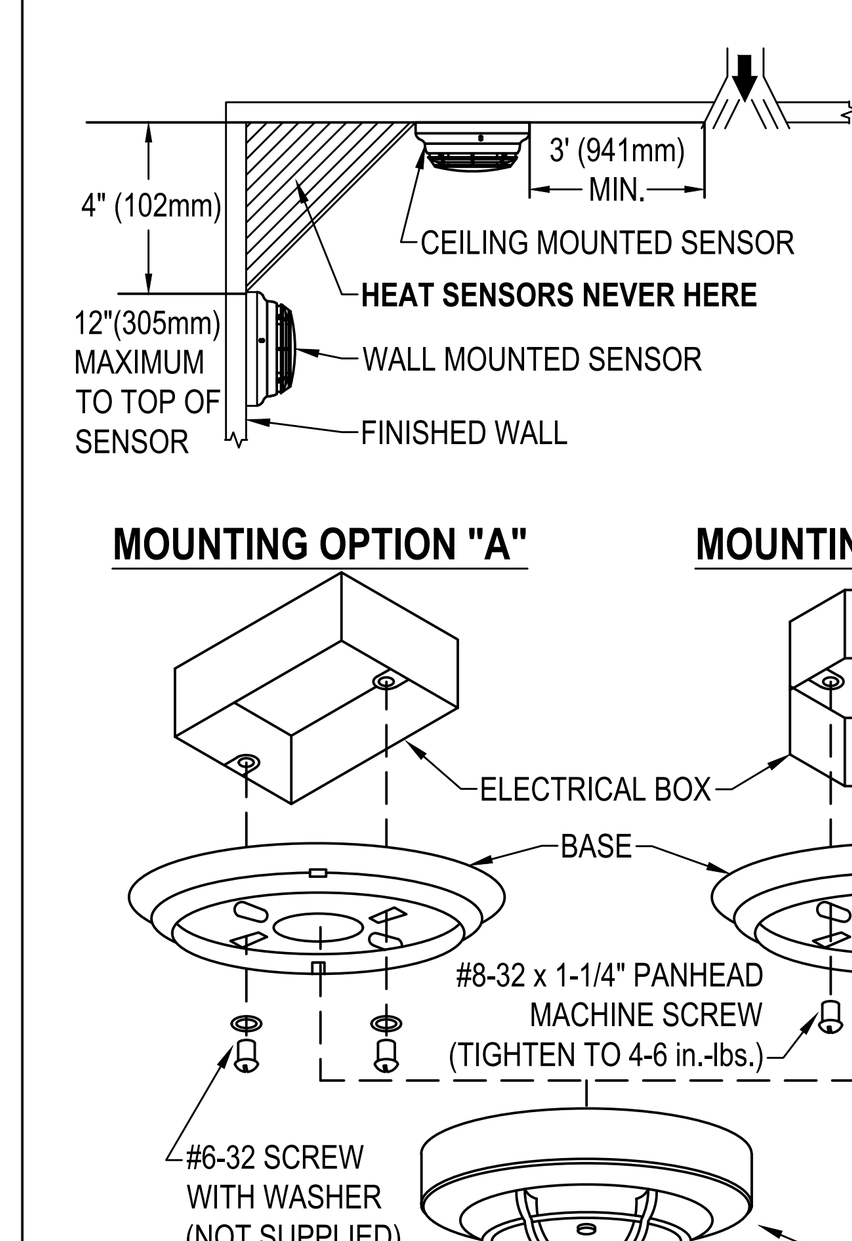
1. 120VAC PRIMARY POWER SOURCE SHALL BE A MECHANICALLY PROTECTED BRANCH CIRCUIT. THE CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, AND BE IDENTIFIED AS "FIRE ALARM CIRCUIT"

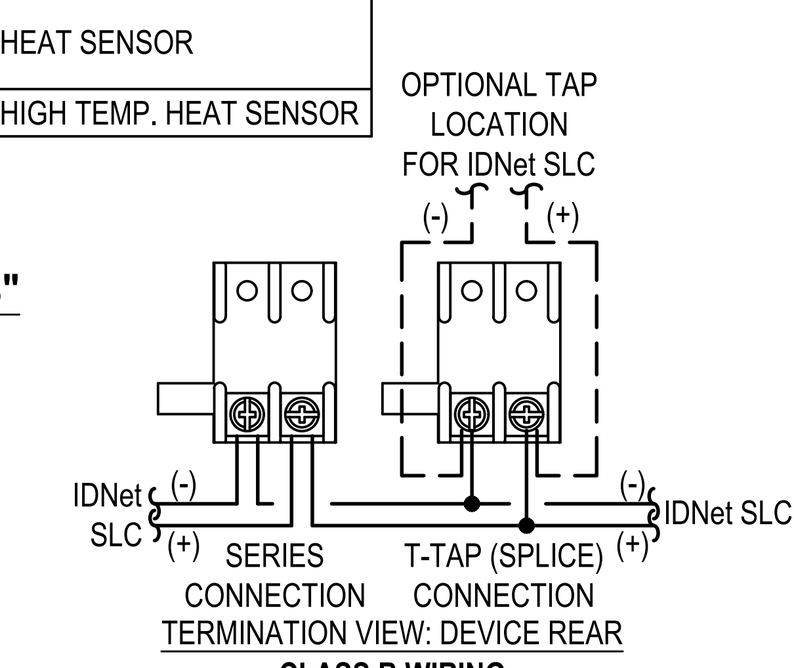
STANDARD SENSOR BASE

SIMPLEX 4098-9792

COMPATIBLE SENSOR HEADS

PID	DESCRIPTION
4098-9714	PHOTOELECTRIC SMOKE SENSOR
4098-9714-IND	
4098-9774	
4098-9733	HEAT SENSOR
4098-9778	
4098-9734	HIGH TEMP. HEAT SENSOR





WIRING NOTES

1. MAINTAIN CORRECT POLARITY ON TERMINAL CONNECTIONS.
2. ALWAYS CUT CONDUCTORS AND SECURE UNDER TERMINALS. NEVER LOOP WIRES UNDER TERMINALS.
3. ANY WIRE SPLICES TO BE MADE BY LISTED AND AHJ APPROVED METHODS.

MOUNTING OPTIONS

OPTION [1]	DESCRIPTION	NOTE
A	SINGLE GANG BOX, 2-1/8" (54mm) DEEP - FLUSH MOUNT	BY OTHERS
B	4" (102mm) OCTAGONAL BOX, 1-1/2" (38mm) DEEP, MINIMUM - FLUSH MOUNT	BY OTHERS
C	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN) W/ SIMPLEX 4098-9832 ADAPTER KIT	BOX BY OTHERS, 4098-9832 ORDERED SEPARATELY
D	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN) W/ SINGLE GANG COVER PLATE 3/4" (19mm) EXTENSION	BY OTHERS

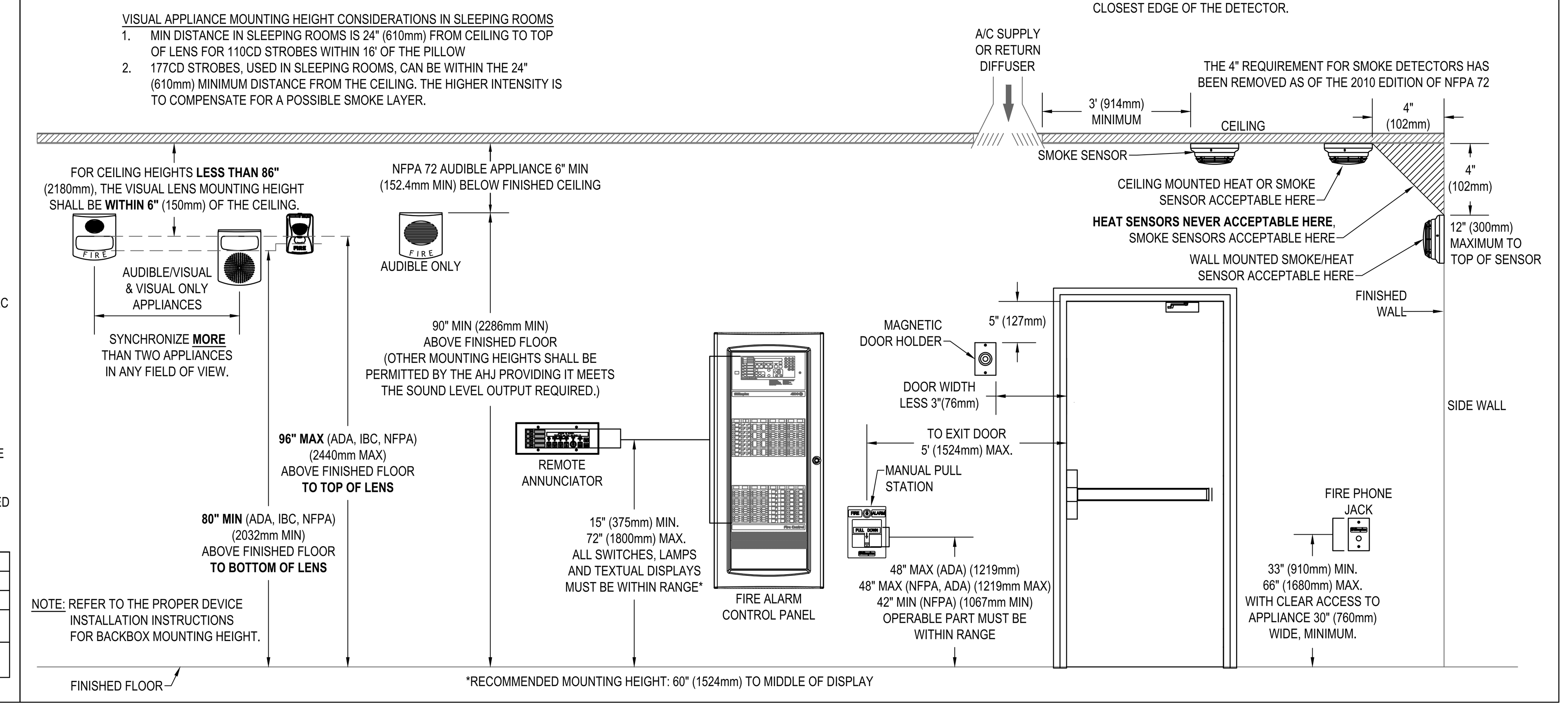
1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 4098-0019 FROM HTTP://WWW.SIMPLEX-FIRE.COM

DEVICE MOUNTING HEIGHT REFERENCE

PER NFPA 72

VISUAL APPLIANCE MOUNTING HEIGHT CONSIDERATIONS IN SLEEPING ROOMS
1. MIN DISTANCE IN SLEEPING ROOMS IS 24" (610mm) FROM CEILING TO TOP OF LENS FOR 110CD STROBES WITHIN 16' OF THE PILLOW
2. 177CD STROBES, USED IN SLEEPING ROOMS, CAN BE WITHIN THE 24" (610mm) MINIMUM DISTANCE FROM THE CEILING. THE HIGHER INTENSITY IS TO COMPENSATE FOR A POSSIBLE SMOKE LAYER.

NOTE: MEASUREMENTS SHOWN ARE TO THE CLOSEST EDGE OF THE DETECTOR.



TYPICAL DEVICE WIRING

SCALE:N.T.S.

Johnson Controls
DISTRICT - 419
14200 E. EXPOSITION AVE
AURORA, CO 80012
SERVICE: 303-355-0500
PHONE: 303-355-0500
FAX: 303-355-0615

NICET CERTIFICATION INFORMATION
CALE RAUCH
NICET Fire Alarm, III
Certification #151588
Valid Through: 12/01/25

03/03/2025

THE MEDICAL CENTER OF AURORA - SOUTH
3RD FLOOR CENTRAL TOWER SMOKE DETECTOR ADDITION

THE MEDICAL CENTER OF AURORA - SOUTH
1501 SOUTH POTOMAC STREET
AURORA, COLORADO 80012

Revisions shown with △ symbol

ISSUE LOG:

MARK	DATE	CAD	CHK	DESCRIPTION

FOR PERMIT

DRAWN BY:	SLT
CHECKED BY:	CBR
ISSUE DATE:	2/25/25
JOB #:	
PROJECT #:	419:650606860

JOHNSON CONTROLS © 2025

SYSTEM: **FIRE ALARM SYSTEM**

SHEET: **3RD FLR PARTIAL DEVICE PLACEMENT PLAN, RISER, AND TYPICAL WIRING**

FA-101

FILE PATH: C:\Users\jraucho\OneDrive - Johnson Controls\Medical Center of Aurora\1501 S Potomac - Aurora South\South Tower - Node 1\48-3rd ICU Coverage - 2025 - 650606860\Fire\FA-101.dwg
LAST SAVED BY: JRAUCHC
LAST PRINTED: 3/3/2025 4:20:38 PM
30" x 42" - Arch E1 Size

© Johnson Controls 2025. All rights reserved. Reuse, copying, modification or alteration of the drawings and other information contained herein is strictly prohibited.

MEDICAL CENTER OF AURORA SOUTH NODE-1 TRANSPONDER-1 4100es XPDR

Module	Qty	Description		Standby Current	Total Standby	Alarm Current	Total Alarm
Panel Equipment							
4100-9600	*1*	*BASIC TRANSPONDER*	*	*0.0870*	*0.0870*	*0.0870*	*0.0870*
4100-3102	*3*	*MAPNET MODULE, UP TO 127 PTS*	*	*0.2550*	*0.7650*	*0.2750*	*0.8250*
4100-4321	*3*	*6 CIRCUIT CLASS B (STYLE Y)*		*0.0250*	*0.0750*	*0.0700*	*0.2100*
4100-3003	*1*	*8 PT AUX RELAY MODULE 3 AMP*		*0.0250*	*0.0250*	*0.2800*	*0.2800*
4100-6005	*1*	*MASTER CONTROLLER POWER SUPPLY*		*0.0000*	*0.0000*	*0.0000*	*0.0000*
4100-5125	*1*	*REMOTE POWER SUPPLY W/CHARGER - 120VAC*		*0.1500*	*0.1500*	*0.1850*	*0.1850*
		Panel Totals			**1.1020**		**1.5870**
Mapnet Addressable Devices (SLC)							
2190-9161	*2*	*MAPNET CLASS B SIGNAL ZAM*	*				
2190-9163	*4*	*MAPNET UNSUPERVISED CONTROL ZAM*	*				
2190-9172	*8*	*MAPNET SUPERVISED IAM*	*				
2099-9795	*15*	*MAPNET SINGLE ACTION PULL STATION*	*				
4098-9714	**219**	**TRUEALARM PHOTO SMOKE SENSOR**					
4098-9733	*5*	*TRUEALARM HEAT SENSOR*					
4098-9706	*18*	*TRUEALARM DUCT SMOKE SENSOR HOUSING W/ RELAY*	*				
4098-9789	*26*	*TRUEALARM SENSOR BASE W/ LED OUTPUT*	*				
4098-9792	**184**	**TRUEALARM SENSOR BASE**	*				
4098-9794	*252*	*TRUEALARM SENSOR SOUNDER BASE*	*				
4098-9795	*126*	*MULTI-SENSOR SOUNDER BASE*	*				
Notification Appliances			**Setting**				
4009-9001	*2*	*FOUR CIRCUIT NAC EXTENDER, 120 VAC*		*0.0000*	*0.0000*	*0.0150*	*0.0300*
4903-9292	*22*	*CH70-2415W-FR CHIME/STROBE (STROBE)*	*15*	*0.0000*	*0.0000*	*0.0600*	*1.3200*
4903-9292	*25*	*CH70-2415W-FR CHIME/STROBE (CHIME)*	*CHIME*	*0.0000*	*0.0000*	*0.0220*	*0.5500*
4904-9137	*53*	*15CD VISIBLE ONLY RED*	*15*	*0.0000*	*0.0000*	*0.0950*	*5.0350*
		Peripheral Totals			**0.0110**		**4.9670**
		Added Current for EPS Conversion of 24 to 29 Volt IDNac Devices			**0.0000**		**0.0000**
		RUI Totals	**0**		**0.0000**		**0.0000**
		Address Totals	**261 Addresses**		**0.4437**		**0.4437**
*** Device Address current draw included below (See Additional Current Draws):**			**System Totals*:**	**Standby**	**1.5567**	**Alarm**	**6.9977**

Battery Set #1 (Cabinet/Charger #1)			Standby Current	Standby Total	Alarm Current	Alarm Total
Select ALL Power Supplies on this battery set:						
RPS-1				1.1130		6.5540
		Sub Total		**1.1130**		**6.5540**
Additional Current Draws:						
MAPNET/IDNet Device Address Communication Current	261	x 0.001700		= 0.4437	x 0.001700	= 0.4437
		Sub Total		**1.5567**		**6.9977**
Spare addressable point capacity	**20%** 53	x 0.0017		= 0.0901	x 0.0017	= 0.0901
		Total		**1.6468**		**7.0878**
Standby Time = 4 Hrs		x 1.6468		= 6.5874 Standby Ah		
Alarm Time = 10 Min		0.16667 x 7.0878		= 1.1813 Alarm Ah		
				7.7687		
Additional Spare Battery Capacity = **20%**			+	1.5537		
				9.3224		
Battery Discharge Factor = **25%**			+	2.3306		
Minimum Battery Required **2081-9288 12AH (2x)**				**11.6530**		
Battery Supplied **2081-9276 33AH (2x)**				**(EXISTING)**		

*** System Totals represent total system current requirements. Those currents may be distributed between multiple battery sets or power supplies as shown above.**

MAPNET CHANNEL 1:M7				SWITCH SETTINGS									
Address	Device Type	Point Type	Location Description	1	2	3	4	5	6	7	8		9
1:M7-1	*ADRPUL*	*PULL*	*1:M7-1 FLR 3 CENTRAL TWR B - ICU POD C*	X								ON	
1:M7-2	*PHOTO*	*VSMOKE*	*1:M7-2 FLR 3 CENTRAL TWR B - VOLUNTEER*		X							ON	
1:M7-3	*PHOTO*	*VSMOKE*	*1:M7-3 FLR 3 CENTRAL TWR B - BATH HALL*	X	X							ON	
1:M7-4	*ADRPUL*	*PULL*	*1:M7-4 FLR 3 CENTRAL TWR B - ICU POD A*			X						ON	
1:M7-5	*ADRPUL*	*PULL*	*1:M7-5 FLR 3 CENTRAL TWR B - ICU POD D*	X		X						ON	
1:M7-6	*ADRPUL*	*PULL*	*1:M7-6 FLR 3 CENTRAL TWR B - ICU SHOWER*		X	X						ON	
1:M7-7	*GENIAM*	*SO*	*1:M7-7 FLR 3 CTRL TWR B STAIRWELL TAMPER*	X	X	X						ON	
1:M7-8	*GENIAM*	*WATER*	*1:M7-8 FLR 3 CTRL TWR B STAIRWELL EAST*				X					ON	
1:M7-9	*RZAM*	*RELAY*	*1:M7-9 CENTRAL TWR B - ROOF - RTU 97-10*	X			X					ON	
1:M7-10	*RPHOTO*	*SDUCT*	*1:M7-10 CENTRAL TWR B - ROOF AHU 97-10*		X		X					ON	
1:M7-11	*RPHOTO*	*SDUCT*	*1:M7-11 CENTRAL TWR B - ROOF AHU 97-10*	X	X		X					ON	
1:M7-12	*RPHOTO*	*SDUCT*	*1:M7-12 CENTRAL TWR B - ROOF AHU 97-10*			X	X					ON	
1:M7-13	*RPHOTO*	*SDUCT*	*1:M7-13 CENTRAL TWR B - ROOF AHU 97-10*	X		X	X					ON	
1:M7-14	*RPHOTO*	*SDUCT*	*1:M7-14 CENTRALTWR B - ROOF AHU 97-13*		X	X	X					ON	
1:M7-15	*RPHOTO*	*SDUCT*	*1:M7-15 CENTRALTWR B - ROOF AHU 97-13*	X	X	X	X					ON	
1:M7-16	*RPHOTO*	*SDUCT*	*1:M7-16 CENTRALTWR B - ROOF AHU 97-13*					X				ON	
1:M7-17	*PHOTO*	*UTILITY*	*1:M7-17 FLR 3 CENTRAL TWR B ICU RM 12*	X				X				ON	
1:M7-18	*PHOTO*	*UTILITY*	*1:M7-18 FLR 3 CENTRAL TWR B ICU RM 13*		X			X				ON	
1:M7-19	*PHOTO*	*UTILITY*	*1:M7-19 FLR 3 CENTRAL TWR B ICU RM 14*	X	X			X				ON	
1:M7-20	*PHOTO*	*UTILITY*	*1:M7-20 FLR 3 CENTRAL TWR B ICU RM 15*			X		X				ON	
1:M7-21	*PHOTO*	*UTILITY*	*1:M7-21 FLR 3 CENTRAL TWR B ICU RM 16*	X		X		X				ON	
1:M7-22	*PHOTO*	*UTILITY*	*1:M7-22 FLR 3 CENTRAL TWR B ICU RM 17*		X	X		X				ON	
1:M7-23	*PHOTO*	*UTILITY*	*1:M7-23 FLR 3 CENTRAL TWR B ICU RM 18*	X	X	X		X				ON	
1:M7-24	*PHOTO*	*UTILITY*	*1:M7-24 FLR 3 CENTRAL TWR B ICU RM 19*				X	X				ON	
1:M7-25	*PHOTO*	*UTILITY*	*1:M7-25 FLR 3 CENTRAL TWR B ICU RM 20*	X			X	X				ON	
1:M7-26	*PHOTO*	*UTILITY*	*1:M7-26 FLR 3 CENTRAL TWR B ICU RM 21*		X		X	X				ON	
1:M7-27	*PHOTO*	*UTILITY*	*1:M7-27 FLR 3 CENTRAL TWR B ICU RM 22*	X	X		X	X				ON	
1:M7-28	*PHOTO*	*UTILITY*	*1:M7-28 FLR 3 CENTRAL TWR B ICU RM 23*			X	X	X				ON	
1:M7-29	*PHOTO*	*VSMOKE*	*1:M7-29 FLR 3 CENTRAL TWR B - BY ICU 29*	X		X	X	X				ON	
1:M7-30	*PHOTO*	*UTILITY*	*1:M7-30 FLR 3 CENTRAL TWR B ICU RM 24*		X	X	X	X				ON	
1:M7-31	*PHOTO*	*UTILITY*	*1:M7-31 FLR 3 CENTRAL TWR B ICU RM 25*	X	X	X	X	X				ON	
1:M7-32	*PHOTO*	*UTILITY*	*1:M7-32 FLR 3 CENTRAL TWR B ICU RM 26*						X			ON	
1:M7-33	*PHOTO*	*VSMOKE*	*1:M7-33 FLR 3 CENTRAL TWR B ICU LOUNGE*	X					X			ON	
1:M7-34	*PHOTO*	*VSMOKE*	*1:M7-34 FLR 3 CTRL TWR A MAIN ELEV LOBBY*		X				X			ON	
1:M7-35	*PHOTO*	*VSMOKE*	*1:M7-35 FLR 3 CENTRAL B - BY ICU SHOWER*	X	X				X			ON	
1:M7-36	*PHOTO*	*UTILITY*	*1:M7-36 FLR 3 CENTRAL TWR B ICU RM 1*			X			X			ON	
1:M7-37	*PHOTO*	*UTILITY*	*1:M7-37 FLR 3 CENTRAL TWR B ICU RM 2*	X		X			X			ON	
1:M7-38	*PHOTO*	*UTILITY*	*1:M7-38 FLR 3 CENTRAL TWR B ICU RM 3*		X	X			X			ON	
1:M7-39	*PHOTO*	*UTILITY*	*1:M7-39 FLR 3 CENTRAL TWR B ICU RM 4*	X	X	X			X			ON	
1:M7-40	*PHOTO*	*UTILITY*	*1:M7-40 FLR 3 CENTRAL TWR B ICU RM 5*				X		X			ON	
1:M7-41	*PHOTO*	*UTILITY*	*1:M7-41 FLR 3 CENTRAL TWR B ICU RM 6*	X			X		X			ON	
1:M7-42	*PHOTO*	*UTILITY*	*1:M7-42 FLR 3 CENTRAL TWR B ICU RM 7*		X		X		X			ON	
1:M7-43	*PHOTO*	*UTILITY*	*1:M7-43 FLR 3 CENTRAL TWR B ICU RM 8*	X	X		X		X			ON	
1:M7-44	*PHOTO*	*UTILITY*	*1:M7-44 FLR 3 CENTRAL TWR B ICU RM 9*			X	X		X			ON	
1:M7-45	*PHOTO*	*UTILITY*	*1:M7-45 FLR 3 CENTRAL TWR B ICU RM 10*	X		X	X		X			ON	
1:M7-46	*PHOTO*	*UTILITY*	*1:M7-46 FLR 3 CENTRAL TWR B ICU RM 11*		X	X	X		X			ON	
1:M7-47	*PHOTO*	*VSMOKE*	*1:M7-47 FLR 3 CENTRAL B ICU BY RM 12*	X	X	X	X		X			ON	
1:M7-48	*PHOTO*	*VSMOKE*	*1:M7-48 FLR 3 CENTRAL B ICU BY RM 15*					X	X			ON	
1:M7-49	*PHOTO*	*VSMOKE*	*1:M7-49 FLR 3 CENTRAL B ICU BY RM 17*	X				X	X			ON	
1:M7-50	*PHOTO*	*VSMOKE*	*1:M7-50 FLR 3 CENTRAL B ICU BY RM 18*		X			X	X			ON	
1:M7-51	*PHOTO*	*VSMOKE*	*1:M7-51 FLR 3 CENTRAL B ICU BY RM 19*	X	X			X	X			ON	
1:M7-52	*PHOTO*	*VSMOKE*	*1:M7-52 FLR 3 CENTRAL TWR B - BY ICU 22*			X		X	X			ON	
1:M7-53	*PHOTO*	*VSMOKE*	*1:M7-53 FLR 3 CTRL TWR B ICU POD D NRSG*	X		X		X	X			ON	
1:M7-54	*PHOTO*	*VSMOKE*	*1:M7-54 FLR 3 CENTRAL TWR B - POD A -MED*		X		X	X	X			ON	
1:M7-55	*PHOTO*	*VSMOKE*	*1:M7-55 FLR 3 CENTRAL B ICU BY RM 25*	X	X	X		X	X			ON	
1:M7-56	*PHOTO*	*VSMOKE*	*1:M7-56 FLR 3 CENTRAL TWR B - BY ICU 26*				X	X	X			ON	
1:M7-57	*PHOTO*	*VSMOKE*	*1:M7-57 FLR 3 CENTRAL TWR B - BY ICU 26*	X			X	X	X			ON	
1:M7-58	*PHOTO*	*VSMOKE*	*1:M7-58 FLR 3 CENTRAL B - ICU - EVS RM*		X		X	X	X			ON	
1:M7-59	*PHOTO*	*VSMOKE*	*1:M7-59 FLR 3 CENTRAL TWR B - BY ICU 2*	X	X		X	X	X			ON	
1:M7-60	*PHOTO*	*VSMOKE*	*1:M7-60 FLR 3 CENTRAL TWR B - BY ICU 4*			X	X	X	X			ON	
1:M7-61	*PHOTO*	*VSMOKE*	*1:M7-61 FLR 3 CENTRAL TWR B - BY ICU 5*	X		X	X	X	X			ON	
1:M7-62	*PHOTO*	*VSMOKE*	*1:M7-62 FLR 3 CENTRAL TWR B ICU PHARM.*		X	X	X	X	X			ON	
1:M7-63	*PHOTO*	*VSMOKE*	*1:M7-63 FLR 3 CENTRAL TWR B - BY ICU 8*	X	X	X	X	X	X			ON	
1:M7-64	*PHOTO*	*VSMOKE*	*1:M7-64 FLR 3 CENTRAL TWR B - BY ICU 10*							X		ON	
1:M7-65	*PHOTO*	*VSMOKE*	*1:M7-65 FLR 3 CENTRAL TWR B - BY ICU 11*	X						X		ON	
1:M7-66	*PHOTO*	*VSMOKE*	*1:M7-66 FLR 3 CENTRAL TWR B - ELEC. ROOM*		X					X		ON	
1:M7-67			*SPARE*	X	X					X		ON	
1:M7-68			*SPARE*			X				X		ON	
1:M7-69			*SPARE*	X		X				X		ON	
1:M7-70	*PHOTO*	*VSMOKE*	*1:M7-70 FLR 3 CENTRAL TWR B - RESP STOR*		X	X				X		ON	
1:M7-71	*PHOTO*	*VSMOKE*	*1:M7-71 FLR 3 CENTRAL TWR B - OFFICE 12*	X	X	X				X		ON	
1:M7-72	*PHOTO*	*VSMOKE*	*1:M7-72 FLR 3 CENTRAL TWR B - CLEAN STOR*				X			X		ON	
1:M7-73	*PHOTO*	*VSMOKE*	*1:M7-73 FLR 3 CENTRAL TWR B - CLEAN STOR*	X			X			X		ON	
1:M7-74	*PHOTO*	*VSMOKE*	*1:M7-74 FLR 3 CENTRAL TWR B - CLEAN STOR*		X		X			X		ON	
1:M7-75	*PHOTO*	*VSMOKE*	*1:M7-75 FLR 3 CENTRAL TWR B-SOIL RES EQU*	X	X		X			X		ON	
1:M7-76			*SPARE*			X	X			X		ON	
1:M7-77			*SPARE*	X		X	X			X		ON	
1:M7-78			*SPARE*		X	X	X			X		ON	
1:M7-79	*PHOTO*	*VSMOKE*	*1:M7-79 FL 3 CENTER TWR B-VOICE/DATA*	X	X	X	X			X		ON	
1:M7-80	*PHOTO*	*VSMOKE*	*1:M7-80 FL 3 CENTER TWR B-UTILITY 34*					X		X		ON	
1:M7-81	*PHOTO*	*VSMOKE*	*1:M7-81 FL 3 CENTER TWR B-CONSULT 33*	X				X		X		ON	
1:M7-82	*PHOTO*	*VSMOKE*	*1:M7-82 FL 3 CENTER TWR B-STORAGE SUPPLY*		X			X		X		ON	
1:M7-83	*OHEAT*	*HEAT*	*1:M7-83 FL 3 CENTER TWR B- EVS 36*	X	X			X		X		ON	
1:M7-84	*PHOTO*	*VSMOKE*	*1:M7-84 FL 3 CENTER TWR B- MED RM 51*			X		X		X		ON	
1:M7-85	*PHOTO*	*VSMOKE*	*1:M7-85 FL 3 CENTER TWR B- CARE NOURISH*	X		X		X		X		ON	
1:M7-86	*PHOTO*	*VSMOKE*	*1:M7-86 FL 3 CENTER TWR B- PHARM*		X	X		X		X		ON	
1:M7-87	*PHOTO*	*VSMOKE*	*1:M7-87 FL 3 CENTER TWR B- OFFICE 45*	X	X	X		X		X		ON	
1:M7-88	*PHOTO*	*VSMOKE*	*1:M7-88 FL 3 CENTER TWR B- SAT PHARM*				X	X		X		ON	
1:M7-89	*PHOTO*	*VSMOKE*	*1:M7-89 FL 3 CENTER TWR B- EQUIP STOR 53*	X			X	X		X		ON	
1:M7-90	*PHOTO*	*VSMOKE*	*1:M7-90 FL 3 CENTER TWR B- N.SOILED UTIL*		X		X	X		X		ON	
1:M7-91	*PHOTO*	*VSMOKE*	*1:M7-91 FL 3 CENTER TWR B- NOURISH 54*	X	X		X	X		X		ON	
1:M7-92	*PHOTO*	*VSMOKE*	*1:M7-92 FL 3 CENTER TWR B- SCAN 46*			X	X	X		X		ON	
1:M7-93			*SPARE*	X		X	X	X		X		ON	
1:M7-94			*SPARE*		X	X	X	X		X		ON	
1:M7-95			*SPARE*	X	X	X	X	X		X		ON	
1:M7-96	**PHOTO**	**VSMOKE**	**1:M7-79 FLR 3 CENTRAL TWR B - CLEAN STOR**						X	X		ON	
1:M7-97	**PHOTO**	**VSMOKE**	**1:M7-80 FLR 3 CENTRAL TWR B - E ELEC CLO**	X					X	X		ON	
1:M7-98	**PHOTO**	**VSMOKE**	**1:M7-81 FLR 3 CENTRAL TWR B - N ANTE RM**		X				X	X		ON	
1:M7-99	**PHOTO**	**VSMOKE**	**1:M7-82 FLR 3 CENTRAL TWR B - S ANTE RM**	X	X				X	X		ON	
1:M7-100			*SPARE*			X			X	X		ON	
THRU													
1:M7-127			*SPARE*	X	X	X	X	X	X	X		ON	

NOTE: THE LABELS SHOWN ABOVE WILL BE USED FOR PROGRAMMING PURPOSES.
THE LABELS ARE BASED UPON INFORMATION SHOWN ON THE ARCHITECTURAL DRAWINGS.
ANY CHANGES TO THESE LABELS MUST BE NOTED ON THE SUBMITTAL REVIEW, PRIOR TO PROGRAMMING.
POINTS SHOWN IN ITALIC TEXT REFER TO EXISTING DEVICES.

GENERAL NOTES:

1. THE INFORMATION OR SYMBOLS SHOWN IN BOLD LINETYPE ARE NEW OR MODIFIED.
2. THE INFORMATION OR SYMBOLS SHOWN IN LIGHT LINETYPE ARE EXISTING TO REMAIN.

Johnson Controls
DISTRICT: 1-418
10600 E. 45TH AVENUE
AURORA, CO 80017
SERVICE: 303-355-6000
PHONE: 303-395-6500
FAX: 303-395-6615

NICET CERTIFICATION INFORMATION
CALE RAUCH
NICET Fire Alarm, III
Certification #151588
Valid Through: 12/01/25
03/03/2025

THE MEDICAL CENTER OF AURORA - SOUTH
3RD FLOOR CENTRAL TOWER SMOKE DETECTOR ADDITION

THE MEDICAL CENTER OF AURORA - SOUTH
1501 SOUTH POTOMAC STREET
AURORA, COLORADO 80012

Revisions shown with ⚠ symbol

ISSUE LOG:

MARK	DATE	CAD	CHK	DESCRIPTION

FOR PERMIT

DRAWN BY:	SLT
CHECKED BY:	CBR
ISSUE DATE:	2/25/25
JOB #:	
PROJECT #:	419-650606860
JOHNSON CONTROLS © 2025	

SYSTEM:
FIRE ALARM SYSTEM

SHEET:
4100 NODE 1 TRANSPONDER 1 CALCUATIONS AND SCHEDULES

FA-601

© Johnson Controls 2025. All rights reserved. Reuse, copying, modification or alteration of the drawings and other information contained herein is strictly prohibited.

FILE PATH: C:\Users\jrauch\OneDrive - Johnson Controls\Medical Center of Aurora\1501 S Potomac - Aurora South\South Tower - Node 1\4B-2in1 IO\ Coverage - 2025 - 650606860\Fire\FA-601.dwg
LAST SAVED BY: JRAUCHC
LAST PRINTED: 3/3/2025 4:20:43 PM
36" x 42" Arch E1 Size

GENERAL NOTES:

1. THIS 48"X36" STATIC GRAPHIC MAP IS NOT SHOWN TO SCALE.

AS OF: 03/03/2025

THE MEDICAL CENTER OF AURORA
1501 S. POTOMAC ST
AURORA, COLORADO 80012



3RD FLOOR

LEGEND:

FATC	FIRE ALARM TERMINAL CABINET
ANN	GRAPHIC ANNUNCIATOR
NAC	NAC PANEL
S	SMOKE DETECTOR
H	HEAT DETECTOR
M	MANUAL PULL STATION
WF	SPRINKLER WATERFLOW VALVE
TS	SPRINKLER TAMPER SWITCH
DD	DUCT DETECTOR

Johnson Controls
AURORA (303) 355-0500

The Medical Center of Aurora
HealthONE

Johnson Controls
DISTRICT - 418
14200 E. EXPOSITION AVE
AURORA, CO 80012
SERVICE: 303-355-0500
PHONE: 303-355-0500
FAX: 303-309-9415

NICET CERTIFICATION INFORMATION

CALE RAUCH
NICET Fire Alarm, III
Certification #151588
Valid Through: 12/01/25

03/03/2025

THE MEDICAL CENTER OF AURORA - SOUTH
3RD FLOOR CENTRAL TOWER SMOKE DETECTOR ADDITION

THE MEDICAL CENTER OF AURORA - SOUTH
1501 SOUTH POTOMAC STREET
AURORA, COLORADO 80012

Revisions shown with ⚠ symbol

ISSUE LOG				
MARK	DATE	CAD	CHK	DESCRIPTION

FOR PERMIT

DRAWN BY:	SLT
CHECKED BY:	CBR
ISSUE DATE:	2/25/25
JOB #:	
PROJECT #:	419:650606860
JOHNSON CONTROLS © 2025	
SYSTEM:	FIRE ALARM SYSTEM
SHEET:	3RD FLOOR STATIC GRAPHIC MAP

FA-801

© Johnson Controls 2025. All rights reserved. Reuse, copying, modification or alteration of the drawings and other information contained herein is strictly prohibited.

FILE PATH: C:\Users\jrauch\OneDrive - Johnson Controls\Medical Center of Aurora\1501 S Potomac - Aurora South\South Tower - Node 1\AB-3rd (G) Coverage - 2025 - 650606860\Fire\FA-801.dwg
LAST SAVED BY: JRAUCHC
LAST PRINTED: 3/3/2025 4:20:49 PM
30" x 42" Arch E1 Size

Johnson Controls
14200 E. Exposition Avenue
Aurora, Colorado 80012

www.simplexgrinnell.com

Tele: (303) 355-0500
Fax: (303) 355-0615

Fire Alarm
Product Data Submittal for:

THE MEDICAL CENTER OF AURORA - SOUTH
3RD FLR CENTRAL TOWER SMOKE DETECTOR ADD
1501 SOUTH POTOMAC STREET
AURORA, COLORADO 80012

NICET CERTIFICATION
INFORMATION

CALE RAUCH
NICET Fire Alarm, III
Certification #151588
Valid Through: 12/01/25

03/03/2025

Prepared for:

HARRIS ELECTRIC
11130 HERRING ROAD
COLORADO SPRINGS, COLORADO

Johnson Controls
14200 E. Exposition Avenue
Aurora, Colorado 80012
Sales: (303) 355-0500
Service: (303) 355-0500
Fax: (303) 355-0615

PROJECT:	THE MEDICAL CENTER OF AURORA - SOUTH 3RD FLR CENTRAL TOWER SMOKE DETECTOR ADD
PREPARED FOR:	HARRIS ELECTRIC

TYPE:	***DESCRIPTION:***
4098-9714	TRUEALARM PHOTO SMOKE SENSOR
4098-9792	TRUEALARM SENSOR BASE

Simplex

*UL, ULC, CSFM Listed; FM Approved**

TrueAlarm Analog Sensors – Photoelectric and Heat, Standard Bases and Accessories

Features

TrueAlarm analog sensing

You can use TrueAlarm analog sensing to digitally transmit analog sensor values with IDNet or MAPNET II two-wire communications.

You can use True Alarm analog sensing with the following Simplex products:

- 4007ES, 4010, 4010ES, 4100ES, and 4100U series fire alarm control units (FACUs), and 4008 series FACUs with reduced feature set.
- 4020, 4100, and 4120 series FACUs, Universal Transponders, and 2120 TrueAlarm CDTs equipped for MAPNET II operation

Features compatible with the FACU

- Peak value logging with accurate analysis of each sensor for individual sensitivity selection
- Sensitivity monitoring meets NFPA 72 sensitivity testing requirements. The automatic individual sensor calibration check verifies sensor integrity
- Automatic environmental compensation, multi-stage alarm operation, and display of sensitivity directly in percent for each foot
- Display and print detailed sensor information in English

Photoelectric smoke sensors features

- Sensitivity levels from 0.2% to 3.1%. See TrueAlarm sensors for more information.

Heat sensors features

- Three fixed temperature sensing thresholds: 135°F, 155°F and 190°F
- Rate-of-rise temperature sensing
- Utility temperature sensing
- Listed to UL 521 and ULC-S530

General features

- Ceiling or wall mounting
- Listed to UL 268 7th Edition and ULC-S529
- NEMA 1 rated. See TrueAlarm analog sensing product selection chart for more information.
- Louvered smoke sensor design enhances smoke capture by directing flow to chamber. Entrance areas are minimally visible when ceiling mounted
- Designed for EMI compatibility
- Magnetic testing
- Different bases support a supervised or unsupervised output relay, or a remote LED alarm indicator

Additional base reference

- For isolator bases, refer to data sheet *S4098-0025*
- For isolator2 bases, refer to data sheet *S4098-0026*
- For sounder bases, refer to data sheet *S4098-0028*
- For photo/heat sensors, refer to data sheet *S4098-0024* , single address and *S4098-0033* , dual address

Description

Digital communication of analog sensing

TrueAlarm analog sensors provide an analog measurement digitally communicated to the host control panel using Simplex addressable communications. The control unit analyses the data, determines an average value, and stores it. Comparing the sensor's present value against its average value and time, determines an alarm or other abnormal condition.

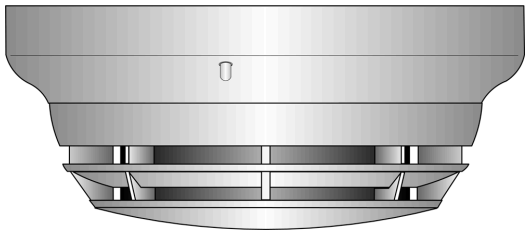
Intelligent data evaluation

Monitoring each sensor's average value provides a continuously shifting reference point. A software filtering process compensates for environmental factors, such as dust and dirt, and component aging, to provide an accurate reference for evaluating new activity. This reduces the probability of false or nuisance alarms caused by shifts in sensitivity.

Control unit selection

The control unit stores peak activity for each sensor for evaluating specific locations. The host control unit determines the alarm set point for each TrueAlarm sensor, selectable as more or less sensitive as the individual application requires.

Figure 1: 4098-9714 TrueAlarm photoelectric sensor mounted in base



Timed/multi-stage selection

You can program the sensor alarm set points for timed automatic sensitivity selection, such as more sensitive at night or less sensitive during day. You can program the control unit to provide multi-stage operation for each sensor.

Sensor alarm and trouble LED indication

Each sensor base's LED pulses to indicate communications with the unit. If the control unit determines a sensor is in alarm, is dirty, or has some other type of trouble, the details display at the control unit and the sensor's base LED turn on steadily. During a system alarm, an LED indicating a trouble returns to pulsing to help identify the alarmed sensors.

TrueAlarm sensor bases and accessories

Sensor base features

Base mounted address selection

- Address remains with its programmed location
- Accessible from front, DIP switch under sensor

General features

- Automatic identification provides default sensitivity when substituting sensor types
- Integral red LED for power-on, pulsing, or alarm or trouble, steady on
- Locking anti-tamper design mounts on standard outlet box
- Magnetically-operated functional test

* These products have been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listings 7272-0026:218, 7271-0026:231, 7270-0026:216, and 7300-0026:217 for allowable values and/or conditions concerning material presented in this document. Additional listings may be applicable, contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.

Sensor bases

4098-9792, standard sensor base

4098-9789, sensor base with wired connections

- 2098-9808 remote LED alarm indicator or 4098-9822 relay. The relay is unsupervised and requires separate 24 VDC.

Supervised relay bases not compatible with 2120 CDT:

- **4098-9791, four-wire sensor base,** use with remote or locally mounted 2098-9737 relay, requires separate 24 VDC
- **4098-9780, two-wire sensor base,** use with remote or locally mounted 4098-9860 relay, no separate power required
- You can program supervised relay operation, and manually operate it from the control unit
- Includes wired connections for remote LED alarm indicator **or** 4098-9822 relay, relay is unsupervised and requires separate 24 VDC

Sensor base options

2098-9737, remote or local mount supervised relay

- DPDT contacts for resistive or suppressed loads
- power limited rating of 3 A at 28 VDC
- non-power limited rating of 3 A at 120 VAC, requires external 24 VDC coil power

4098-9860, remote or local mount supervised relay

- SPDT dry contacts, power limited rating of 2 A at 30 VDC, resistive. Non-power limited rating of 0.5 A at 125 VAC, resistive

4098-9822, LED annunciation relay

- Activates when base LED is on steady, indicating local alarm or trouble
- DPDT contacts for resistive or suppressed loads, power limited rating of 2 A at 28 VDC. Non-power limited rating of 1/2 A at 120 VAC, requires external 24 VDC coil power

4098-9832, adapter plate

- Required for surface or semi-flush mounting to 4 in. square electrical box and for surface mounting to a 4 in. octagonal box
- You can use the 4098-9832 adapter plate for cosmetic retrofitting to an existing 6 3/8 in. diameter base product

2098-9808, remote red LED alarm indicator

- Mounts on single gang box

Figure 2: Remote red LED alarm indicator



Description

TrueAlarm sensor bases contain integral addressable electronics that monitor the status of the detachable photoelectric or heat sensors. The sensors transmit digitalized output to the system fire alarm control unit every four seconds.

You can change different TrueAlarm sensor types to meet location requirements. You can use this feature to substitute sensors during building construction. When conditions are temporarily dusty, you can install heat sensors without reprogramming the control unit. Although the control unit indicates an incorrect sensor type, the heat sensor operates at a default sensitivity and provides heat detection for building protection at that location.

Mounting reference

Figure 3: Mounting reference

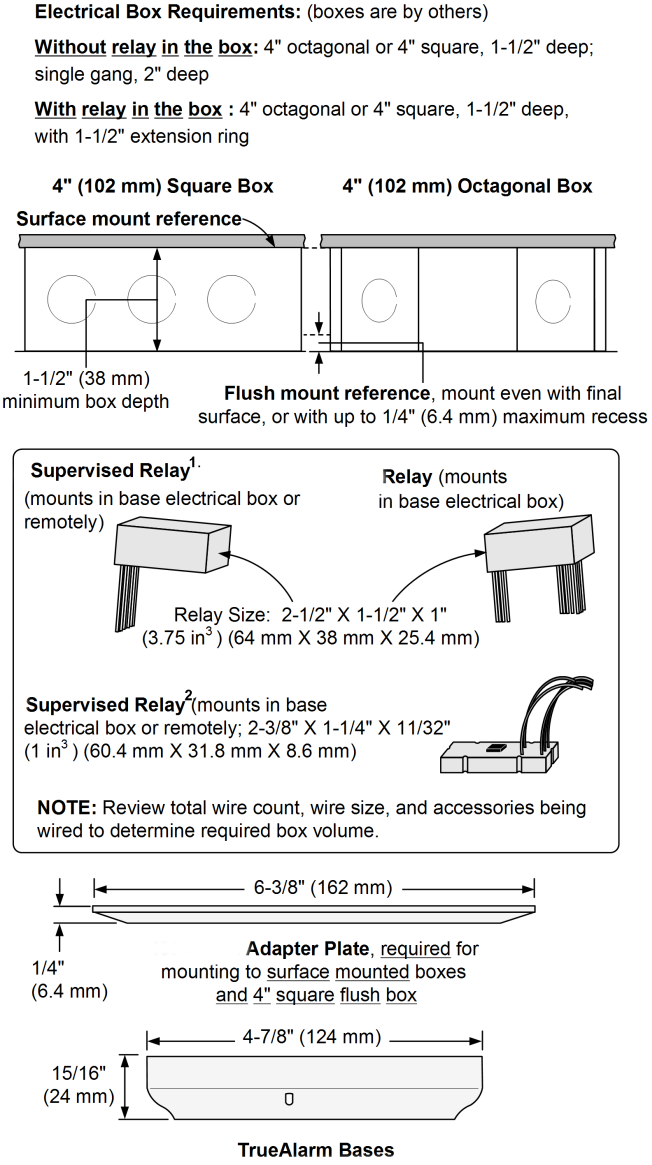


Table 1: Product mounting - SKU reference

Product	SKU
Relay	4098-9822
Supervised relay	Example 1 2098-9739 Example 2 4098-9860
Adapter plate	4098-9832
TrueAlarm bases	4098-9780, 4098-9789, 4098-9791, 4098-9792

RSN: 1881024
Permit #2025-2513109-CT
Page 10 of 13

TrueAlarm sensors

Features

- Sealed against rear air flow entry
- Interchangeable mounting
- EMI/RFI shielded electronics
- Heat sensors:
  - Selectable rate-compensated, fixed temperature sensing with or without rate-of-rise operation

Table 2: Rated spacing distance between sensors

Fixed Temp. Setting	UL and ULC Spacing	FM Spacing, Either Fixed Temperature Setting
135°F (57.2°C) 190°F (88°C)	60 ft x 60 ft (18.3 m)	20 ft x 20 ft (6.1 m) for fixed temperature only. RTI = Quick
155°F (68°C)	40 ft x 40 ft (12.2 m)	50 ft x 50 ft (15.2 m) for fixed temperature with either rate-of-rise selection. RTI = Ultra Fast

Note: 190°F (88°C) ratings only apply to the 4098-9734 sensor.

Smoke sensors

- Photoelectric technology sensing
- 360° smoke entry for optimum response
- Built-in insect screens

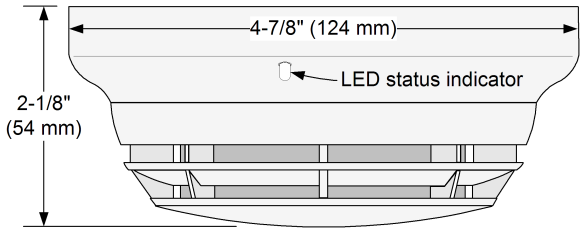
4098-9714 photoelectric sensor

TrueAlarm photoelectric sensors use a stable, pulsed LED light source and a silicon photodiode receiver to deliver low power smoke sensing. There are three user-selectable sensitivities for special applications for each individual sensor: 0.2%, 0.5%, and 1% for each foot. Standard sensitivity is 1.25% to 3.1% for each foot. The fire alarm control unit can vary the sensitivity for normal applications between 1.25% and 3.1% for each foot.

Note: Fixed sensitivity settings higher than 1.0% for each foot are not UL268 7th Edition compliant.

The sensor head design provides 360° smoke entry for response to smoke from any direction. Due to its photoelectric operation, air velocity is not normally a factor, except for impact on area smoke flow.

Figure 4: 4098-9714 photoelectric sensor with base



4098-9733 and 4098-9734 heat sensors

TrueAlarm heat sensors are self-restoring and provide rate-compensated, fixed temperature sensing with or without rate-of-rise temperature sensing. The sensor measures the local temperature for analysis at the fire alarm control unit.

You can select rate-of-rise temperature detection at the control unit for either 15°F or 20°F, (8.3°C or 11.1°C) for each minute. Fixed temperature sensing is independent of rate-of-rise sensing and you can program it to operate at 135°F or 155°F (57.2°C or 68°C). The 4098-9734 sensor provides an additional 190°F (88°C) set point.

In a slowly developing fire, the temperature may not increase rapidly enough to operate the rate-of-rise feature. However, when the temperature reaches the rated fixed temperature setting, it triggers an alarm.

You can program TrueAlarm heat sensors as a utility device to monitor for temperature extremes in the range of 32°F to 155°F (0°C to 68°C). This feature can provide freeze warnings, or alert you to HVAC system problems. Refer to panel specifications for availability.

Figure 5: 4098-9733 heat sensor with base

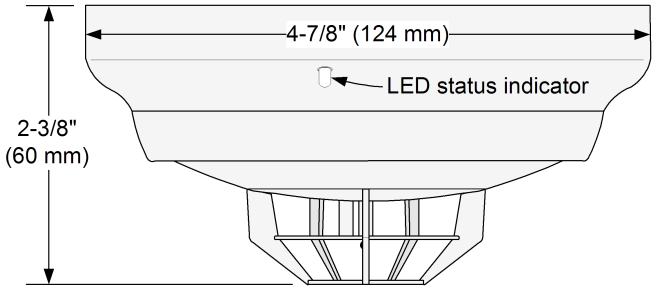
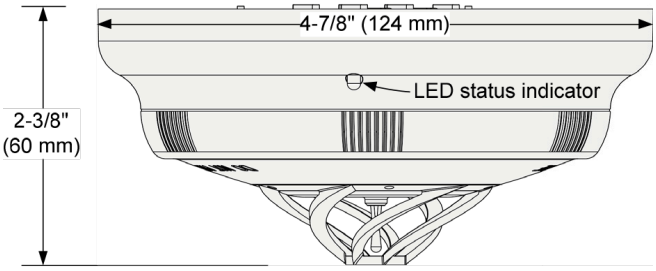


Figure 6: 4098-9734 high temperature heat sensor with base



WARNING: In most fires, hazardous levels of smoke and toxic gas can build up before a heat detection device would initiate an alarm. In cases where Life Safety is a factor, the use of smoke detection is highly recommended.

Application reference

Only choose sensor locations after careful consideration of the physical layout and contents of the area that you want to protect. Refer to NFPA 72, *the National Fire Alarm and Signaling Code*. On smooth ceilings, you can use a smoke sensor spacing of 30 ft (9.1 m) as a guide.

For detailed application information including sensitivity selection, refer to *4098 Detectors, Sensors, and Bases Application Manual (574-709)*.

RSN: 1881024
Permit #2025-2513109-CT
Page 11 of 13

TrueAlarm analog sensing product selection chart

Table 3: TrueAlarm sensor bases, for use with sensors 4098-9714 and 4098-9733

SKU	Color	Description	Compatibility	Mounting requirements
4098-9792	White	Standard sensor base	No options	4 in. octagonal or 4 in. square box, 1 1/2 in. min. depth, or single gang box, 2 in. min. depth
4098-9776	Black			
4098-9789 4098-9789IND	White	Sensor base with connections for remote LED alarm indicator **or** unsupervised relay	2098-9808 remote alarm indicator or 4098-9822 unsupervised relay	4 in. octagonal or 4 in. square box **Note:** Box depth requirements depend on total wire count and wire size. See Table 5
4098-9775	Black			
4098-9791 **Note:** NOT compatible with the 2120 CDT	White	Four-wire sensor supervised relay base with connections for LED indicator or unsupervised relay	2098-9737 supervised remote relay	
			2098-9808 remote alarm indicator or 4098-9822 unsupervised relay	
4098-9780 **Note:** NOT compatible with the 2120 CDT	White	Two-wire sensor supervised relay base with connections for LED indicator or unsupervised relay	4098-9860 supervised remote relay	
			2098-9808 remote alarm indicator or 4098-9822 unsupervised relay	

Note: SKU numbers ending in IND are assembled in India.

Refer to *4098 Detectors, Sensors, and Bases Application Manual (574-709)* and *4098 Smoke/Heat Sensor Bases Installation Instructions (574-707)* for additional information.

Table 4: TrueAlarm sensors

SKU	Color	Description	Compatibility	Mounting requirements
4098-9714 4098-9714-IND	White	Photoelectric smoke sensor	Bases 4098-9775, 4098-9776, 4098-9792, 4098-9789, 4098-9791, and 4098-9780	Refer to base requirements
4098-9774	Black			
4098-9733	White	Heat sensor		
4098-9778	Black			
4098-9734	White	High temperature heat sensor		

Note:

- SKUs are NEMA 1 rated.
- The 4098-9734 Heat Sensor is only compatible with IDNet on the 4100ES, 4010ES, and 4007ES

Table 5: TrueAlarm sensor and base accessories

SKU	Description	Compatibility	Mounting requirements
2098-9737	Supervised relay, mounts remote or in base electrical box	4098-9791 base	Remote mounting requires 4 in. octagonal or 4 in. square box, 1 1/2 in. minimum depth Base mounting requires 4 in. octagonal box, 2 1/8 in. deep with 1 1/2 in. extension ring
4098-9860	Supervised relay, mounts remote or in base electrical box	4098-9780 base	
2098-9808	Remote red LED alarm indicator on single gang stainless steel plate	Bases 4098-9789, 4098-9791, and 4098-9780	Single gang box, 1 1/2 in. minimum depth
4098-9822	Unsupervised relay, tracks base led status. **Note:** Only mounts in base electrical box.	Bases 4098-9789, 4098-9791, and 4098-9780	4 in. octagonal box, 2 1/8 in. deep with 1 1/2 in. extension ring
4098-9832	Adapter plate	Bases 4098-9792, 4098-9789, 4098-9791, and 4098-9780	Required for surface or semi-flush mounted 4 in. square box and for surface mounted 4 in. octagonal box

Note: 2098-9808 is NEMA 1 rated.

Specifications

Table 6: General operating specifications

Specification	Rating
Communications and sensor supervisory power	IDNet or MAPNET II communications, auto-selected, one address for each base
Communications connections	Screw terminals for in/out wiring, 18 to 14 AWG, 0.82 mm^2 to 2.08 mm^2
Remote LED alarm indicator current	1 mA typical, no impact to alarm current
Remote LED alarm indicator and relay connections	Color coded wire leads, 18 AWG, 0.82 mm^2
UL listed operating temperature range	32°F to 100°F, 0°C to 38°C

RSN: 1881024
Permit #2025-2513109-CT

Table 6: General operating specifications

Specification		Rating
Operating temperature range	with 4098-9733 Heat Sensor	32°F to 122°F, 0°C to 50°C
	with 4098-9714 Smoke Sensor	15°F to 122°F, -9°C to 50°C
	with 4098-9734 Heat Sensor	32°F to 150°F, 0°C to 66°C
Storage temperature range		0°F to 140°F, -18°C to 60°C
Humidity range		10% to 95% RH
4098-9714 smoke sensor air velocity rating		0 to 4000 ft/min, 0 to 1220 m/min
Housing color		Frost white or black

Table 7: 4098-9791 Base with supervised remote relay 2098-9737

Specification	Rating
Externally supplied relay coil voltage	18 VDC to 32 VDC, nominal 24 VDC
Supervisory current	270 µA, from 24 VDC supply
Alarm current with 2098-9737 relay	28 mA, from 24 VDC supply
Note: See Sensor base options for contact ratings.	

Table 8: 4098-9780 Base with supervised remote relay 4098-9860

Specification	Rating
Power	Supplied from communications

Table 9: 4098-9822 Unsupervised relay, requirements for bases 4098-9789, 4098-9791, and 4098-9780

Specification	Rating
Externally supplied relay coil voltage	18 VDC to 32 VDC, nominal 24 VDC
Supervisory current	Supplied from communications
Alarm current	13 mA from separate 24 VDC supply
Note: See Sensor base options for contact ratings.	

© 2023 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision and are subject to change without notice. Additional listings may be applicable, contact your local Simplex® product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. Simplex, and the product names listed in this material are marks or registered marks. Unauthorized use is strictly prohibited. NFPA 72 and National Fire Alarm Code are registered trademarks of the National Fire Protection Association (NFPA).