

Lee's Summit KCUC Urology & Oncology
451 NW Murray Road
Lee's Summit, MO 64081

Fire Alarm System input / output matrix

[illegible]

Sheet Legends	
F1	Cover Sheet
F2	Floor Plan
F3	Details and Calculations

J Webb Inc
P O Box 952 Lawrence Kansas 66044
jeffwebb@jwebb-k.com (785) 856-FIRE (3473) fax (785) 856-3474 cell (913) 710-2046

CODE INFORMATION

Project Type:	Business
Building Codes:	IBC-2018 NFPA-72 2016
Number of Stories:	1
Primary Use Group:	B
Sprinklered:	100%

Copyright © 2022
BG Consultants, Inc.



Jarrod E. Mann, P.E.
MO #2008014536



Manhattan Lawrence Emporia

M/E/P
BG Consultants, Inc.
1405 Wakarusa Drive
Lawrence, Kansas 66049
ph: 785/749 4474
www.bgcons.com
Missouri State Certificate of Authority # F00856806

KCUC Urology & Oncology

451 NW Murray Road
Lee's Summit, MO 64081

Revision Key

No.	Date	Revision
-----	------	----------

Project Manager:
Jarrold E. Mann, P.E.

Project Number:
22-1054L Phase 22-05

Date of Issue:
2022-03-10

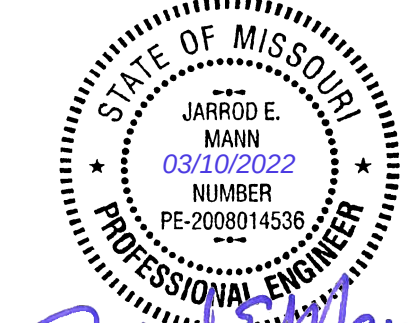
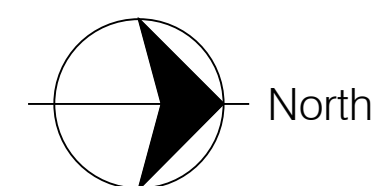
Sheet Number:

F-1

Cover Sheet



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



Jarrod E. Mann, P.E.
MO #2008014536



Manhattan Lawrence Emporia

M/E/P

BG Consultants, Inc.
 1405 Wakarusa Drive
 Lawrence, Kansas 66049
 ph: 785/749 4474
 www.bgcons.com
 Missouri State Certificate of Authority # F00856806

KCUC Urology & Oncology

451 NW Murray Road
Lee's Summit, MO 64081

Revision Key

[illegible]

Project Manager:
Jarrod E. Mann, P.E.

Project Number:
22-1054L Phase 22-05

Date of Issue:
2022-03-10

Sheet Number:

F-2

Project Name: Lee Summit KCUC

Project ID:

Prepared By: Jeff Webb

Date: 3/2/2022

Standby Hours: 24

Alarm Mins: 5

Derating Factor: 1.2

Voltage Drop Warning Threshold %: 10

FACP

Panel ID: FACP

Location:

Model: 6808 Add. Fire Alarm Control Panel

Volts: 24 VDC

Max NAC Current: 3.0 Amps

Max Panel Current: 6.0 Amps

Ckt.#	Circuit Name	Qty	Current Draw	Wire AWG	Ohms Per Length(ft) Actual	Volts @	%Drop		
FACP	FACP	1	0.170	0.365					
SK	Photo, Photo-T, PhotoR	1	0.000	0.000					
SK	Heat, Heat-HT, ROR	1	0.000	0.000					
SK	Beam, Beam-T	1	0.000	0.000					
SK	Duct	1	0.000	0.000					
SK	Acclimate	1	0.000	0.000					
SK	FIRE-CO	1	0.000	0.000					
SK-PHOTO-W	Photo W	1	0.000	0.000					
SK-PHOTO-R-W	Photo-R-W	1	0.000	0.000					
SK-PHOTO-T-W	Photo-T-W	1	0.000	0.000					
SK-HEAT-W	Heat-W	1	0.000	0.000					
SK-HEAT-ROR-W	Heat-ROR-W	1	0.000	0.000					
SK-HEAT-HT-W	Heat-HT-W	1	0.000	0.000					
SK	Control	1	0.000	0.000					
SK	Control-6	1	0.000	0.000					
SK	RelayMon-2	1	0.000	0.000					
SK	Monitor, Minimon	4	0.002	0.002					
SK	Monitor-2	1	0.000	0.000					
SK	Monitor-10	1	0.000	0.000					
SK	Pull-SA, Pull-DA	3	0.001	0.001					
SK	Relay	1	0.000	0.000					
SK	Relay-6	1	0.000	0.000					
SK	Zone	1	0.000	0.000					
SK	Zone-6	1	0.000	0.000					
SK	Isolator Module	1	0.000	0.000					
B224BI	Isolator Base	1	0.000	0.000					
B200SR	Sounder Base	1	0.000	0.000					
B200S	Isolator Base	1	0.000	0.000					
B200SR-LF	Low Freq Sounder Base	1	0.000	0.000					
B200S-LF	Low Freq Sounder Base	1	0.000	0.000					
B224RB	Relay Base	1	0.000	0.000					
RTS151	Magnetic Remote Test	1	0.000	0.000					
RTS151KEY	Key Activated Test	1	0.000	0.000					
RA100Z	Remote LED	1	0.000	0.000					
6860	LCD Remote Annunc	1	0.025	0.050					
5824	Serial/Parallel Module	1	0.000	0.000					
5496	Power Expander	1	0.000	0.000					
5895XL	Power Expander	1	0.000	0.000					
5865-4	LED Annunciator (4G)	1	0.000	0.000					
5865-3	LED Annunciator (3G)	1	0.000	0.000					
5880	LED Driver Module	1	0.000	0.000					
5863	Relay Module	1	0.000	0.000					
SK-NIC	Network Input Card	1	0.000	0.000					
SK-FML	Multi-Mode Fiber Card	0	0.000	0.000					
SK-FSL	Single-Mode Fiber Card	0	0.000	0.000					
NAC #1	Notification Appl Circuit	###	0.000	0.160 #14 Solid	2.52	300	1.51	20.16	1.19%
NAC #2	Notification Appl Circuit	###	0.000	0.284 #14 Solid	2.52	300	1.51	19.97	2.10%
NAC #3	Notification Appl Circuit	###	0.000	0.923 #14 Solid	2.52	300	1.51	19.00	6.84%
NAC #4	Notification Appl Circuit	###	0.000	0.852 #14 Solid	2.52	300	1.51	19.11	6.31%
Total Standby Current (Amps)		0.199	2.638	Total Alarm Current (Amps)					
Standby Time In Hours		24	0.083	Alarm Time In Minutes / 60				(5 Mins)	
Total Standby AH Required		4.768	0.220	Total Alarm AH Required					
Total Combined AH Required		4.99							
Multiply By The Derating Factor		1.20							
Minimum Battery AmpHours Required		5.99							

FAAP placement per AHJ if required

FACP

Five LEDs indicate system status.

Acknowledge alarms and troubles

Silence alarms and troubles

Reset alarms and smoke detectors

For entering numeric data (* and # keys currently not used).

Arrow keys are for moving through the menu. ENTER key accepts selections.

Turning key activates User Menu

18 Amph

18 Amph

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

S

R/P

M

I

R

END

Fire Alarm Control Panel

Fire Alarm Annunciator

NAC Panel

Ceiling Horn Strobe

Ceiling Strobe

Horn / Strobe

Horn

Strobe

Pull Station

Heat Detector

Smoke Detector

Duct Detector

Reset for Duct Detector

Monitor Module

Isolator Module

Relay Module

end of line resistor

Maximum Lens Height 30'

Maximum Lens Height 30'

Mounting Lens Height 80"-96"

Mounting Lens Height 80"-96"

Mounting Height 42"-48"

Wiring Legend

A Addressable SLC Circuits 18 gauge

B Notification Circuits 14 gauge

C S Bus Circuits 18 gauge 4 conductor

SLC Circuit

Dotted line path shows how wire distance is calculated for the SLC device at the end of the run. The wire distance must be less than the maximum per wire gauge.

Gauge	Max. Distance
22 AWG	1500 ft.
18 AWG	3900 ft.
16 AWG	6200 ft.
14 AWG	10,000 ft.

Maximum loop resistance = 50 ohms

Installation Notes

Addressable Lay-Out

1 Detectors

2 Modules

Waterflow & Tamper addresses to be determined at install

HVAC & Duct Detector shutdown to be determined at install

General Notes

1. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION

2. THE POWER CIRCUIT TO THE FIRE ALARM CONTROL PANEL AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED CIRCUIT BREAKER, SHALL HAVE RED MARKING, LOCK ON PROVISION, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL.

3. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED BEFORE THE BUILDING IS CLEAN AND ACCEPTED.

Fire Alarm Control Panel:

Primary AC:

Mechanical Specifications:

Overall Dimensions:

Weight:

Color:

Telephone Requirements:

Type of Jack:

UL Listed / NFPA 72

120 VRMS at 50/60 hz, 2.75A

Flush Mount

14.5"W x 24.75"H x 3.5"D

16"W x 26.4"H x 4.65"D

28lbs

Red

FCC part 15 and part 68 approved

RJ31X (two required)

Key Notes

1. All sprinkler system waterflow switches, and shutoff tamper switches to be wired to the fire alarm system.

2. IMC 606.2.1 Smoke Detectors shall be installed in return air systems with a design capacity greater than 2000cfm.

3. IMC 606.2 Smoke Detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floor, and ceilings of the room or space in which the smoke is generated.

4. The floor plan drawings showing device and equipment locations are schematic only and are not intended to show exact location unless dimensions are noted on the drawing. The right to make any reasonable changes in location within 6' 0", or ceiling to wall without affecting NFPA spacing requirements is reserved by the fire alarm contractor.

FAACP

FAAP

NAC

X

X

X

H

X

F

H

S

<