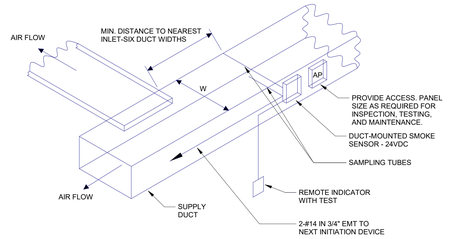
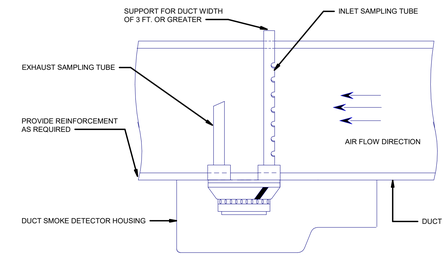


NOTES:

1. IN AIR DISTRIBUTION SYSTEMS WITH A CAPACITY GREATER THAN 2,000CFM, PROVIDE LISTED SMOKE DETECTORS AS FOLLOWS:
   - A. SUPPLY SIDE - DOWNSTREAM OF ANY AIR FILTERS AND AHEAD OF ANY BRANCH CONNECTION.
   - B. RETURN SIDE - UPSTREAM OF ANY AIR FILTERS, EXHAUST AIR CONNECTIONS, OUTDOOR AIR CONNECTIONS, OR DECONTAMINATION EQUIPMENT AND APPLIANCES.
   - C. WHERE DUCTS PENETRATE SMOKE PARTITIONS, ACTIVATION SHALL CLOSE THE MOTORIZED SMOKE DAMPER.
   - D. DETECTOR LOCATION SHALL BE ACCESSIBLE FOR INSPECTION, TESTING, AND MAINTENANCE.

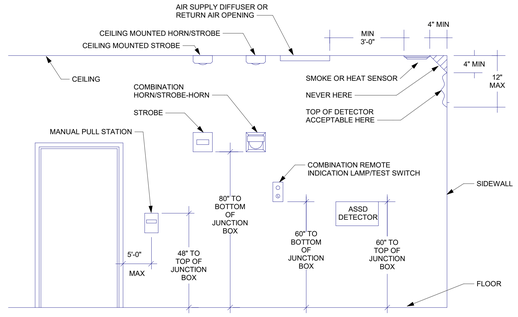
3 DUCT SMOKE DETECTOR INSTALLATION DETAIL
NTS



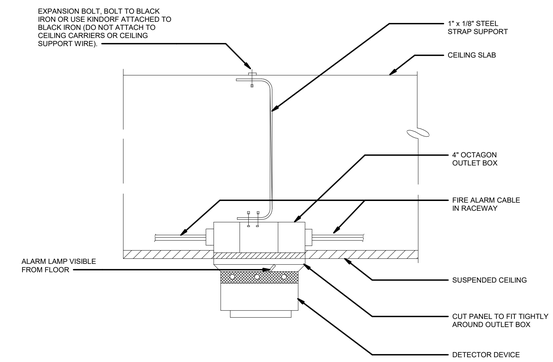
NOTES:

1. FIRE ALARM WORK SHALL BE SUBMITTED UNDER SEPARATE PERMIT AND APPROVED PRIOR TO COMMENCING WORK. ALL FIRE ALARM SHOWN HEREIN SHALL BE FOR REFERENCE ONLY.
2. ALL DUCT DETECTORS SHALL BE SUPPLIED WITH REMOTE LED/TEST SWITCH MODULES. COORDINATE THE LOCATION OF THESE MODULES WITH THE NEW FACILITY ENGINEER.

5 TYPICAL DUCT DETECTOR INSTALLATION DETAIL
NTS



4 TYPICAL MOUNTING HEIGHTS FOR FIRE ALARM WALL-MOUNTED DEVICES
NTS

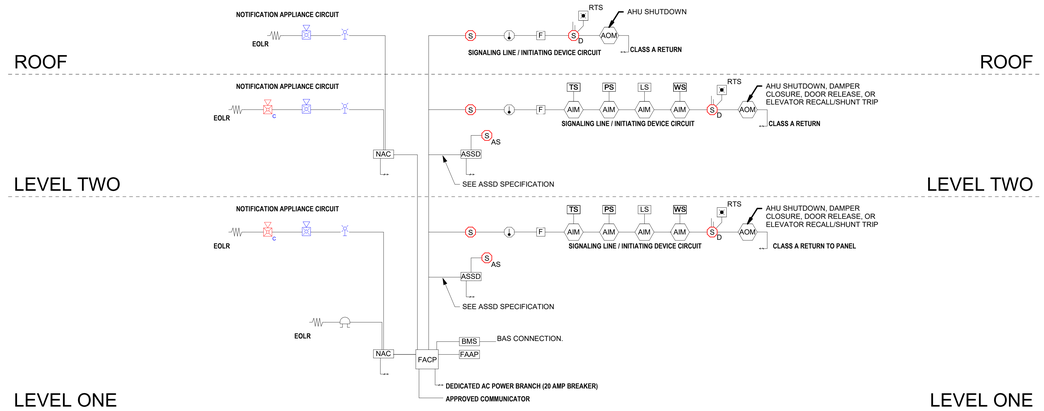


2 SMOKE DETECTOR IN SUSPENDED CEILING DETAIL
NTS

	TYPE		DISPLAY					A/V			ELEVATOR					INTERFACES			HVAC	
	SUPERVISORY	TROUBLE	ALARM	TEST DESCRIPTION AT ANNUNCIATOR	GRAPHIC ANNUNCIATOR INDICATORS	PRINT	AUDIBLE SIGNAL THROUGHOUT BUILDING	VISUAL SIGNAL THROUGHOUT BUILDING	CENTRAL STATION SIGNAL	EXTERIOR BELL	PRIMARY RECALL	ALTERNATE RECALL	CAR DISPATCH FIRE HAT	TOP OF SHAFT DAMPER	SHUNT TRIP	MAGNETIC DOOR HOLDER RELEASE	SECURED DOORS UNLOCK	BADGE READER SIGNAL TO BMS	CLOSE ASSOCIATED FIRE RATED DAMPERS	ASSOCIATED DUCT DETECTOR SOLENOID	SHUTDOWN ASSOCIATED HVAC UNITS
MANUAL PULL STATIONS	X			X	X	X	X	X	X									X	X	X			
SPOT DETECTION																							
AREA SMOKE DETECTOR	X			X	X	X	X	X	X									X	X	X		X	
AREA SMOKE DETECTOR (PREACTION)	X			X	X	X	X	X	X									X	X	X	X	X	
AREA HEAT DETECTOR	X			X	X	X	X	X	X									X	X	X			
AREA HEAT DETECTOR (PREACTION)	X			X	X	X	X	X	X									X	X	X	X		
DUCT SMOKE DETECTOR (AIR HANDLER)		X		X	X	X	X	X												X			X
DUCT SMOKE DETECTOR (DAMPER)		X		X	X	X	X	X												X		X	
DUCT SMOKE DETECTOR (CRAC/CRAH)		X		X	X	X	X	X												X			
INTEGRATED DUCT SMOKE DETECTOR (CRAC/CRAH)		X		X	X	X	X	X												X			
ASPIRATING SMOKE DETECTION																							
ALERT		X		X	X	X	X	X												X			
ACTION		X		X	X	X	X	X												X			
FIRE 1	X			X	X	X	X	X	X	X								X	X	X		X	
FIRE 2	X			X	X	X	X	X	X	X								X	X	X	X	X	
TROUBLE SIGNAL			X	X	X	X	X	X												X			
POWER SUPPLY TROUBLE SIGNAL			X	X	X	X	X	X												X			
SPRINKLER																							
FLOW OR PRESSURE SWITCH	X			X	X	X	X	X	X	X	X							X	X	X			
LOW AIR PRESSURE IN PREACTION OR DRY SYSTEM		X		X	X	X	X	X												X			
VALVE SUPERVISORY SWITCH		X		X	X	X	X	X												X			
FIRE PUMP RUNNING		X		X	X	X	X	X												X			
FIRE PUMP FAULT		X		X	X	X	X	X												X			
FIRE PUMP PHASE LOSS		X		X	X	X	X	X												X			
FIRE PUMP PHASE REVERSAL		X		X	X	X	X	X												X			
ELEVATOR RECALL																							
SMOKE DETECTOR (PRIMARY LEVEL)	X			X	X	X	X	X	X	X				X				X	X	X		X	
SMOKE DETECTOR (ALTERNATE LEVEL)	X			X	X	X	X	X	X	X		X						X	X	X		X	
SMOKE DETECTOR (MACHINE ROOM OR SHAFT)	X			X	X	X	X	X	X					X	X			X	X	X			
HEAT DETECTOR (MACHINE ROOM OR SHAFT)	X			X	X	X	X	X	X	X				X		X	X	X	X	X			
SHUNT TRIP POWER MONITOR		X		X	X	X	X	X												X			
SYSTEM																							
SYSTEM TROUBLES			X	X	X	X	X	X												X			

NOTE: PREACTION SOLENOID TO BE ACTIVATED UPON BOTH LOSS OF PRESSURE ALARM IN SYSTEM AND ASSOCIATED FIRE ALARM DETECTION EVENT FROM MATRIX ABOVE.

6 FIRE ALARM SEQUENCE OF OPERATIONS
NTS



NOTE:

RISER DIAGRAM DOES NOT REFLECT ACTUAL QUANTITIES OF DEVICES.

1 FIRE ALARM RISER DIAGRAM
NTS

DEFERRED SUBMITTAL
ALL WORK SHOWN IS TO ILLUSTRATE DESIGN INTENT

serverfarm
CORGAN
TGRWA STRUCTURAL ENGINEERS
kW Mission Critical Engineering Member of WSP
EP ENGINEERING PLUS
Kimley»Horn

ISSUES

3	01.23.2026	60% DESIGN DELIVERABLE

REVISIONS

kW Mission Critical Engineering
Contact: Stephan Slabicky Phone: 212.951.3943
Engineer: EOR
License #: 123456 Exp. Date: 00/00/0000

NOT FOR CONSTRUCTION

Date: 00/00/0000

SERVERFARM

Clarksville, AR

FIRE ALARM DETAILS

JOB US0049903.5614
SHEET FA05-01

1/23/2026 4:02:35 PM FA05-01 FIRE ALARM DETAILS