

**FIRE ALARM RISER GENERAL NOTES:**

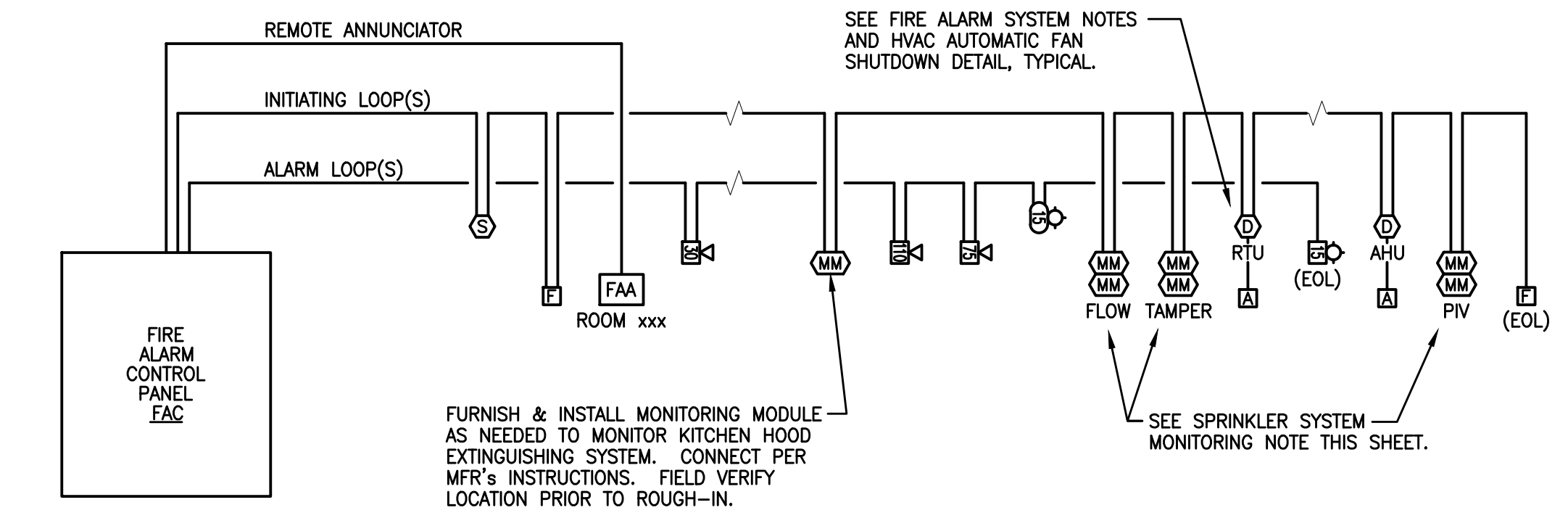
1. ALL RISER CONDUIT SHALL BE MINIMUM 3/4" OR LARGER AS REQUIRED.
2. ALL DEVICE CIRCUIT CONDUIT RUNS SHALL BE 1/2" MINIMUM OR LARGER AS REQUIRED.
3. POWER EXTENDER PANELS "FPE" ARE LOCATED ON FIRE ALARM RISER FOR DIAGRAMMATIC PURPOSES ONLY. PROVIDE QUANTITY OF FPE PANELS AS REQUIRED FOR ACTUAL LOADS. LOCATE AS REQUIRED FOR COVERAGE OF THE BUILDING. PROVIDE NUMBER OF CIRCUITS AS REQUIRED BY LOADS TO 120V PANELS INDICATED AND SHOW LOCATIONS ON FIRE ALARM SHOP DRAWINGS.
4. PROVIDE FIBER CONVERTERS AT NETWORK NODES AND PANELS AS REQUIRED FOR A COMPLETE NETWORKED CAMPUS FIRE ALARM SYSTEM. FIRE ALARM SIGNALS SHALL REPORT TO MONITORING FACILITY FROM MAIN FIRE ALARM CONTROL PANEL IN AREA A FOR ALL CAMPUS BUILDINGS.
5. ELEVATOR: WHERE EXISTING ELEVATOR FEEDER BREAKERS ARE SHUNT TRIP BREAKERS, WIRE SO THEY TRIP OFF IN ACCORDANCE WITH NFPA AND LOCAL CODES. SHUNT TRIP ELEVATOR MAIN BREAKERS PRIOR TO APPLICATION OF WATER WITHIN MACHINE ROOM OR ELEVATOR EQUIPMENT AREAS.
6. ELEVATOR: PROVIDE HEAT DETECTORS FOR EACH SPRINKLER HEAD IN ELEVATOR HOISTWAY AND IN ELEVATOR EQUIPMENT AREAS AND CONTROL ROOMS. DETECTORS SHALL BE LOCATED WITHIN 24 INCHES OF EACH SPRINKLER HEAD.
7. ELEVATOR: ELEVATOR RE-CALL SHALL BE INITIATED UPON ACTIVATION OF SMOKE DETECTORS IN ELEVATOR HOISTWAY OR ELEVATOR LOBBY.
8. FIRE SPRINKLER: WIRING OF FLOW AND TAMPER SWITCHES ARE A PART OF THIS CONTRACT. COORDINATE WITH OTHER TRADES AND CONNECT COMPLETE AS DIRECTED BY SPRINKLER CONTRACTOR. SWITCHES SHALL BE PROVIDED BY OTHERS AND WIRED UNDER DIVISION 26/26.

**FIRE ALARM RISER KEYNOTES:**

- (A)** CONNECT WITH 1#12G, 2#12, 3/4" TO A 20A CIRCUIT BREAKER IN NEARBY 120/208V PANEL. PROVIDE LOCK-OUT HASP FOR BREAKER. PAINT CIRCUIT BREAKER HANDLE RED, AND LABEL ACCORDINGLY. EXISTING 20A CIRCUITS FREED BY DEMOLITION MAY BE REUSED PROVIDED THE ABOVE LOCK-OUT, MARKING, AND LABELING REQUIREMENTS ARE MET. PROVIDE LABEL WITH PANEL NAME AND CIRCUIT NUMBER AT ALL FACs, FPEs, AND FIRE ALARM AMPLIFIER CABINETS.
- (B)** EXISTING DUCT OR IPDACT TO BE REUSED. COORDINATE WITH THE OWNER'S I.T. DIRECTOR FOR PHONE, NETWORK, AND/OR CELL PHONE CONNECTIONS.
- (C)** EXISTING EST FIRE ALARM CONTROL PANEL TO BE REUSED. A VOICE COMMAND MODULE AND AMPLIFIER MODULE(S) AND ADDITIONAL REMOTE AMPLIFIER CABINETS SHALL BE PROVIDED FOR NUMBER OF SPEAKER CIRCUITS REQUIRED FOR A COMPLETE FIRE ALARM SYSTEM. PROVIDE ONE SPARE AMPLIFIER MINIMUM AT EACH AMPLIFIER LOCATION WITH AUTOMATIC SWITCHOVER CAPABILITIES. IF THE NUMBER OF NORMAL AMPLIFIERS EXCEEDS 2, PROVIDE ONE ADDITIONAL SPARE AMPLIFIER MINIMUM FOR EVERY TWO ADDITIONAL NORMAL AMPLIFIERS SO THAT ALL SPEAKER CIRCUITS ARE BACKED UP WITH SPARE AMPLIFIERS.
- (D)** VOICE COMMAND CENTER (VCC) AND REMOTE VOICE COMMAND CENTER (RVCC) SHALL ALLOW FIRE PERSONNEL TO BROADCAST INSTRUCTIONS TO ALL FIRE ALARM SPEAKER LOCATIONS IN FACILITY. PROVIDE LABEL "FIRE DEPARTMENT USE ONLY" - RED LABEL WITH WHITE LETTERING. FIRE ALARM SYSTEM IS DEDICATED TO FIRE ALARM NOTIFICATION ONLY.
- (E)** PROVIDE RED RECORD DOCUMENT CABINET AT FAC PER NFPA 72 REQUIREMENTS.

**1 TYPICAL FIRE ALARM RISER DIAGRAM - PANELS**  
NOT TO SCALE

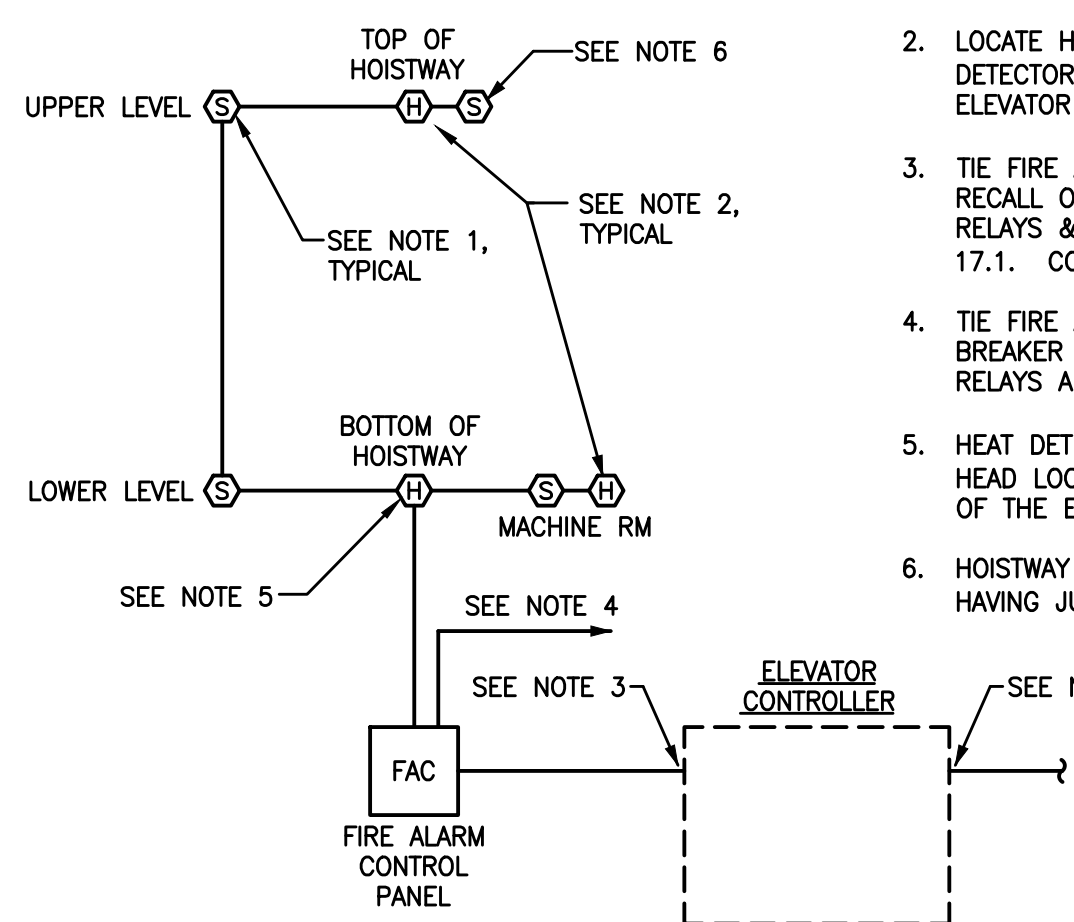
**SPRINKLER SYSTEM MONITORING NOTE:**  
FLOW, TAMPER, AND FV MONITORING LOCATIONS SHOWN ARE PER FIRE PROTECTION DRAWINGS. FURNISH & INSTALL MONITORING MODULES AS NEEDED TO MONITOR SPRINKLER FLOW, TAMPER, & FV SWITCHES. VERIFY NUMBER REQ'D AND LOCATIONS WITH SPRINKLER CONTRACTOR AND SPRINKLER SYSTEM SHOP DRAWINGS PRIOR TO STARTING WORK AND INSTALL ACCORDINGLY. PROVIDE A MONITORING MODULE FOR EACH VALVE. NO CHANGEOVER WILL BE ISSUED FOR ADDITIONAL WORK NOT INDICATED ON THE DRAWINGS BUT REQ'D TO PROPERLY MONITOR THE SPRINKLER SYSTEM.



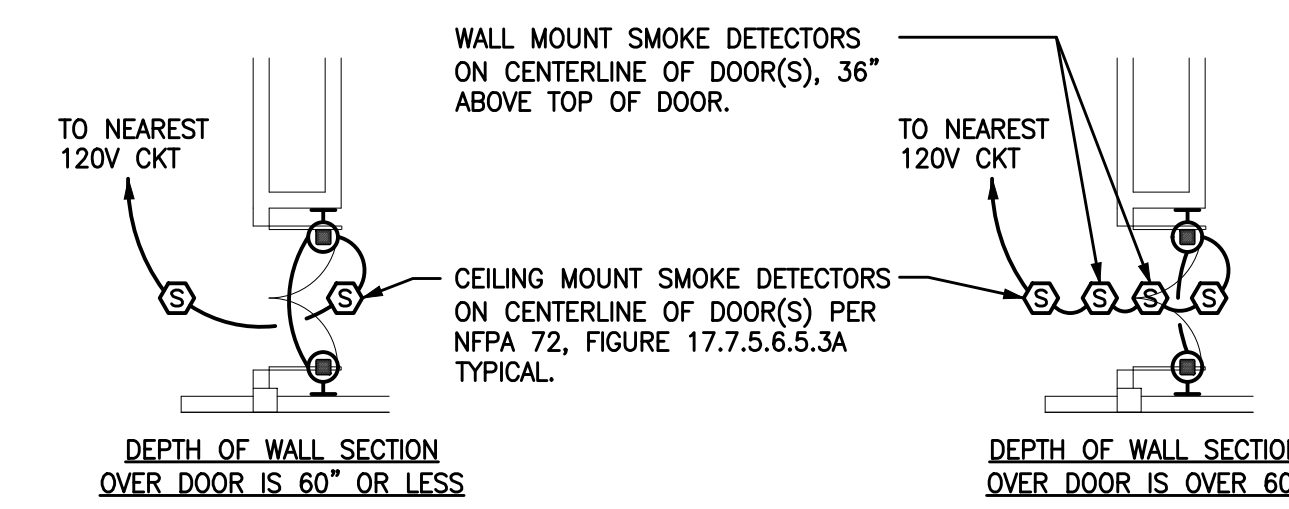
**2 TYPICAL FIRE ALARM RISER DIAGRAM - DEVICES**  
NOT TO SCALE

**ELEVATOR NOTES:**

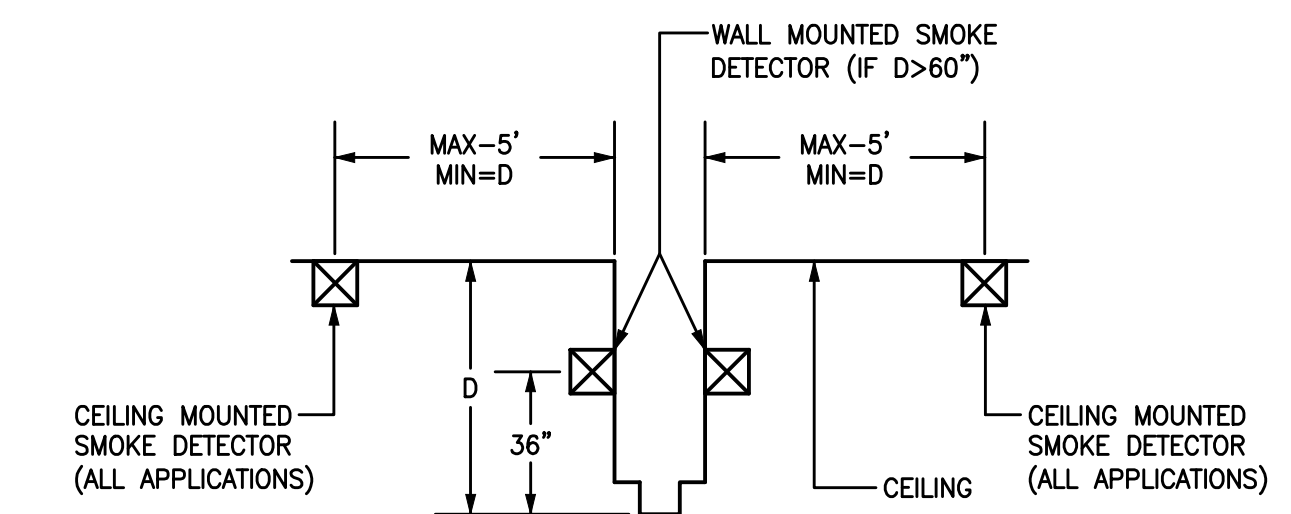
1. LOCATE SMOKE DETECTORS IN LOBBIES AND MACHINE ROOM ON CEILING NEAR CENTER OF ROOM, 36" FROM ANY AIR VENT.
2. LOCATE HEAT DETECTORS IN HOISTWAY AND MACHINE ROOM WITHIN 24" OF SPRINKLER HEADS. HEAT DETECTOR IN BOTTOM OF HOISTWAY MAY BE ELIMINATED IF SPRINKLER HEAD IS LOCATED WITHIN 24" OF ELEVATOR PIT FLOOR.
3. THE FIRE ALARM SYSTEM TO ELEVATOR CONTROLLER PER THE MFR'S RECOMMENDATIONS SO THAT ELEVATOR RECALL OCCURS UPON ACTIVATION OF THE LOBBY, HOISTWAY, OR MACHINE ROOM DETECTORS. PROVIDE ALL RELAYS & CONTROL MODULES NECESSARY TO SEND THE ELEVATOR RECALL SIGNALS REQUIRED BY ASME 17.1. COORDINATE WITH OWNER'S ELEVATOR VENDOR PRIOR TO STARTING WORK TO AVOID CONFLICTS.
4. THE FIRE ALARM SYSTEM TO SHUNT TRIP OF ELEVATOR CIRCUIT BREAKER AS REQUIRED TO TRIP THE BREAKER UPON ACTIVATION OF THE HOISTWAY OR MACHINE ROOM HEAT DETECTORS. PROVIDE ALL FAC RELAYS AND CONTROL MODULES NECESSARY TO SEND THE SIGNAL.
5. HEAT DETECTOR IN ELEVATOR PIT (BOTTOM OF HOISTWAY) MAY BE ELIMINATED IF THERE IS NO SPRINKLER HEAD LOCATED IN THE ELEVATOR PIT, OR IF THE SPRINKLER HEAD IS LOCATED WITHIN 24" OF THE BOTTOM OF THE ELEVATOR PIT FLOOR.
6. HOISTWAY SMOKE DETECTOR TO BE ELIMINATED IF NOT SPECIFICALLY REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) AND/OR THE ELEVATOR SUPPLIER.



**3 ELEVATOR RISER DIAGRAM (Sprinkled Building)**  
NOT TO SCALE

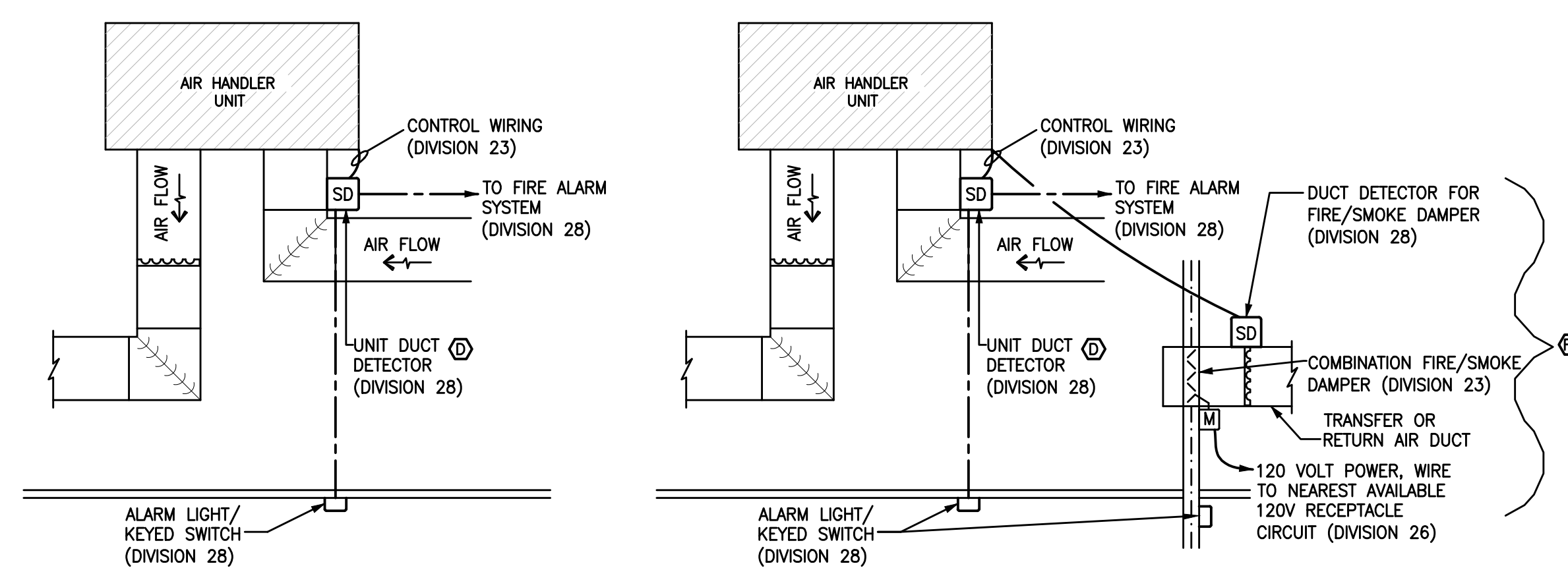


**4 TYPICAL WIRING-SMOKE DETECTORS AT RATED DOORS**  
NOT TO SCALE



**5 DETAIL-SMOKE DETECTOR AT RATED DOORS**  
NOT TO SCALE

WIRE 120V CIRCUIT FOR ELECTROMAGNETIC DOOR HOLDERS THRU RELAY BASE OR REMOTE RELAY MODULE AS REQUIRED TO RELEASE DOOR HOLDERS UPON ACTIVATION OF EITHER SMOKE DETECTOR OR BUILDING FIRE ALARM SYSTEM.



- NOTES:**
1. PROVIDE UNIT DUCT MOUNTED SMOKE DETECTORS FOR EACH AIR HANDLER UNIT ABOVE 2000CFM AND MAKE-UP AIR UNITS AS SHOWN. PROVIDE (2) UNIT DUCT MOUNTED SMOKE DETECTORS FOR EACH AIR HANDLER UNIT ABOVE 15000CFM. PROVIDE ALL WIRING, CONDUIT, CONTROL MODULES, RELAYS, SOFTWARE AND PROGRAMMING REQUIRED TO CONNECT TO FIRE ALARM SYSTEM, INTEGRATE INTO MECHANICAL SYSTEM AND SHUT DOWN UNIT PER NFPA-72.
  2. PROVIDE DUCT SMOKE DETECTORS FOR FIRE/SMOKE DAMPERS LOCATED WITHIN DUCTS. FOR FIRE/SMOKE DAMPERS THROUGH WALLS AND NOT LOCATED WITHIN DUCTS, PROVIDE SMOKE DETECTORS RATED FOR AIR FLOW. INSTALL DUCT SMOKE DETECTORS PER THE MANUFACTURER'S INSTRUCTIONS, PROVIDE SAMPLING TUBE LENGTHS AS REQUIRED FOR DUCT TYPES AND WIDTHS PROVIDED.
  3. FOR ALL DUCT SMOKE DETECTORS AND SMOKE DETECTORS LOCATED IN CONCEALED LOCATIONS, PROVIDE REMOTE ALARM INDICATOR WITH KEYP TEST SWITCH.

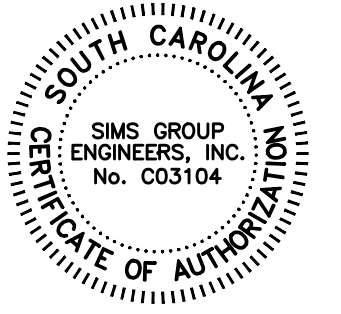
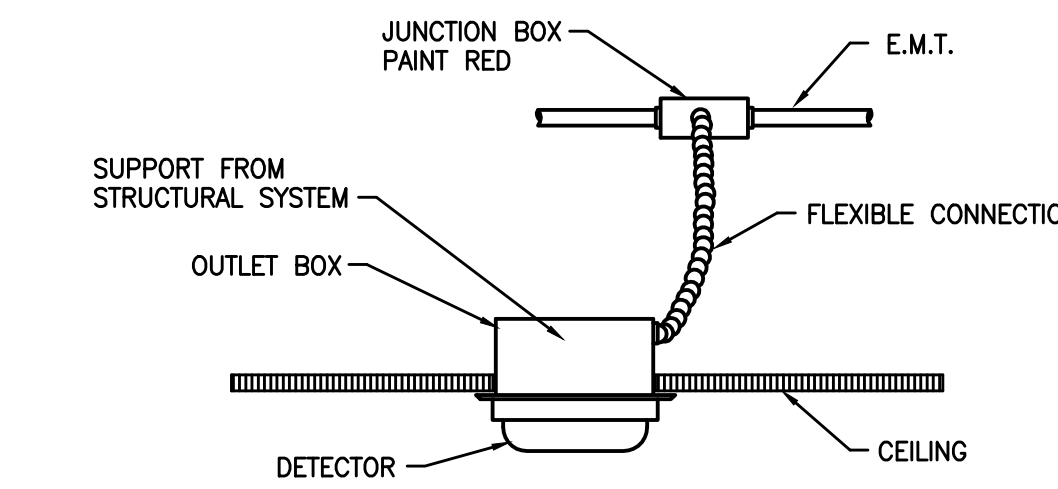
**6 HVAC AUTOMATIC FAN SHUTDOWN**  
NOT TO SCALE

FIRE ALARM SPEAKER TAP SCHEDULE			
SPACE	VOICE INTELLIGIBILITY OBTAINABLE	SPEAKER TAPS (WATTS)	NOTES
LARGE GYM / WRESTLING ROOM	NO	2	NOTE 1, 2, 3
CAFETERIA / AUDITORIUM / STAGE	NO	2	NOTE 1, 2, 3
KITCHEN / DISHWASHING	NO	2	NOTE 1, 2, 3
MECHANICAL ROOMS / BOILER ROOMS	NO	2	NOTE 1, 2, 3
SMALL GYM / AUXILIARY GYM	YES	1	NOTE 1, 3
PE ROOM / MULTI-PURPOSE ROOM	YES	1	NOTE 1, 3
MEDIA CENTER	YES	1	NOTE 1, 3
LARGE CORRIDORS (>20FT WIDE)	YES	1	NOTE 1, 3
CORRIDORS, LOBBIES	YES	1/2	NOTE 1, 3
ELECTRICAL ROOMS, DATA ROOMS	YES	1/2	NOTE 1, 3
MULTI-PERSON TOILETS	YES	1/2	NOTE 1, 3
STANDARD CLASSROOMS (<=800SF)	YES	1/2	NOTE 1, 3
LARGE CLASSROOMS (>800SF)	YES	1	NOTE 1, 3
NURSES OFFICE, MULTI PERSON WORKROOMS	YES	1	NOTE 1, 3
WORKROOM, OFFICE WITH ATTACHED TOILET	YES	1/2	NOTE 1, 3
SPACES NOT SPECIFICALLY LISTED (<=800SF)	YES	1/2	NOTE 1, 3
SPACES NOT SPECIFICALLY LISTED (>800SF)	YES	1	NOTE 1, 3

**FIRE ALARM SPEAKER TAP SCHEDULE NOTES:**

1. TAP SPEAKERS PER SCHEDULE UNLESS NOTED OTHERWISE ON DRAWINGS.
2. SPACE SIZE AND CONSTRUCTION MATERIAL PROPERTIES MAY NOT ALLOW FOR INTELLIGIBILITY.
3. WHERE CONFLICTS EXIST THE SPEAKER TAP SCHEDULE SHALL SUPERCEDE TAPS NOTED ON THE PLANS.

**7 SMOKE DETECTOR INSTALLATION DETAIL**  
NOT TO SCALE



**FIRE ALARM REPLACEMENT  
AIRPORT HIGH SCHOOL  
LEXINGTON SCHOOL DISTRICT TWO**

Date	Description