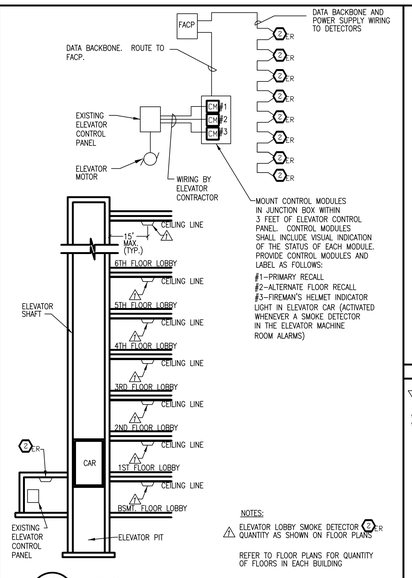
Fire Alarm Symbols

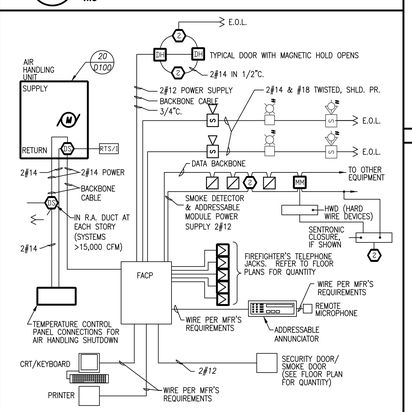
- FACP — New Fire Alarm Control Panel
- FACP — Existing Fire Alarm Panel
- FAAP — New Fire Alarm Annunciator Panel
- FAAP — Existing Fire Alarm Annunciator Panel
- New Fire Alarm Pull Station
- Existing Fire Alarm Pull Station
- H — New Fire Alarm Horn
- H — Existing Fire Alarm Horn
- M — New Fire Alarm Mini Horn
- S — New Fire Alarm Speaker
- S — Existing Fire Alarm Speaker
- H — New Fire Alarm Horn/Strobe, (w) is Candela Rating
- H — Existing Fire Alarm Horn/Strobe, (w) is Candela Rating
- S — New Fire Alarm Speaker/Strobe, (w) is Candela Rating
- S — Existing Fire Alarm Speaker/Strobe, (w) is Candela Rating
- New Ceiling Mounted Fire Alarm Speaker/Strobe, (w) is Candela Rating
- New Ceiling Mounted Fire Alarm Speaker
- New Ceiling Mounted Fire Alarm Strobe, (w) is Candela Rating
- New Supervised Fire Alarm Horn Loudspeaker
- New Fire Alarm Strobe, (w) is Candela Rating
- Existing Fire Alarm Strobe, (w) is Candela Rating
- New Intelligent Photoelectric Smoke Detector
- Existing Smoke Detector
- New Intelligent Photoelectric Smoke Detector For Elevator Recall
- ER — Existing Smoke Detector For Elevator Recall
- New Intelligent 135F Fixed & Rate of Rise Heat Detector
- Existing Intelligent 135F Fixed & Rate of Rise Heat Detector
- New Conventional Fixed Temp Heat Detector, (w) is Temp Rating

Fire Alarm Symbols Continued

- Existing Conventional Fixed Temp Heat Detector, (w) is Temp Rating
- New Intelligent Photoelectric Duct Smoke Detector
- Existing Intelligent Photoelectric Duct Smoke Detector
- New Monitor Module
- New Control Module
- New Magnetic Door Holder
- Existing Magnetic Door Holder
- New Sprinkler Tamper Switch
- Existing Sprinkler Tamper Switch
- New Sprinkler Flow Switch
- Existing Sprinkler Flow Switch
- New Electric Door Strike
- Existing Electric Door Strike
- New Fire Fighters Telephone Hand set
- Existing Fire Fighters Telephone Hand set
- New Fire Fighters Telephone Jack
- Existing Fire Fighters Telephone Jack
- Existing Fire Suppression System
- New Fan Shutdown Relay
- Existing Fan Shutdown Relay
- New Pressure Switch
- Existing Pressure Switch
- New Smoke Damper
- Existing Smoke Damper
- RTS/I — Remote Test Switch W/Indicator



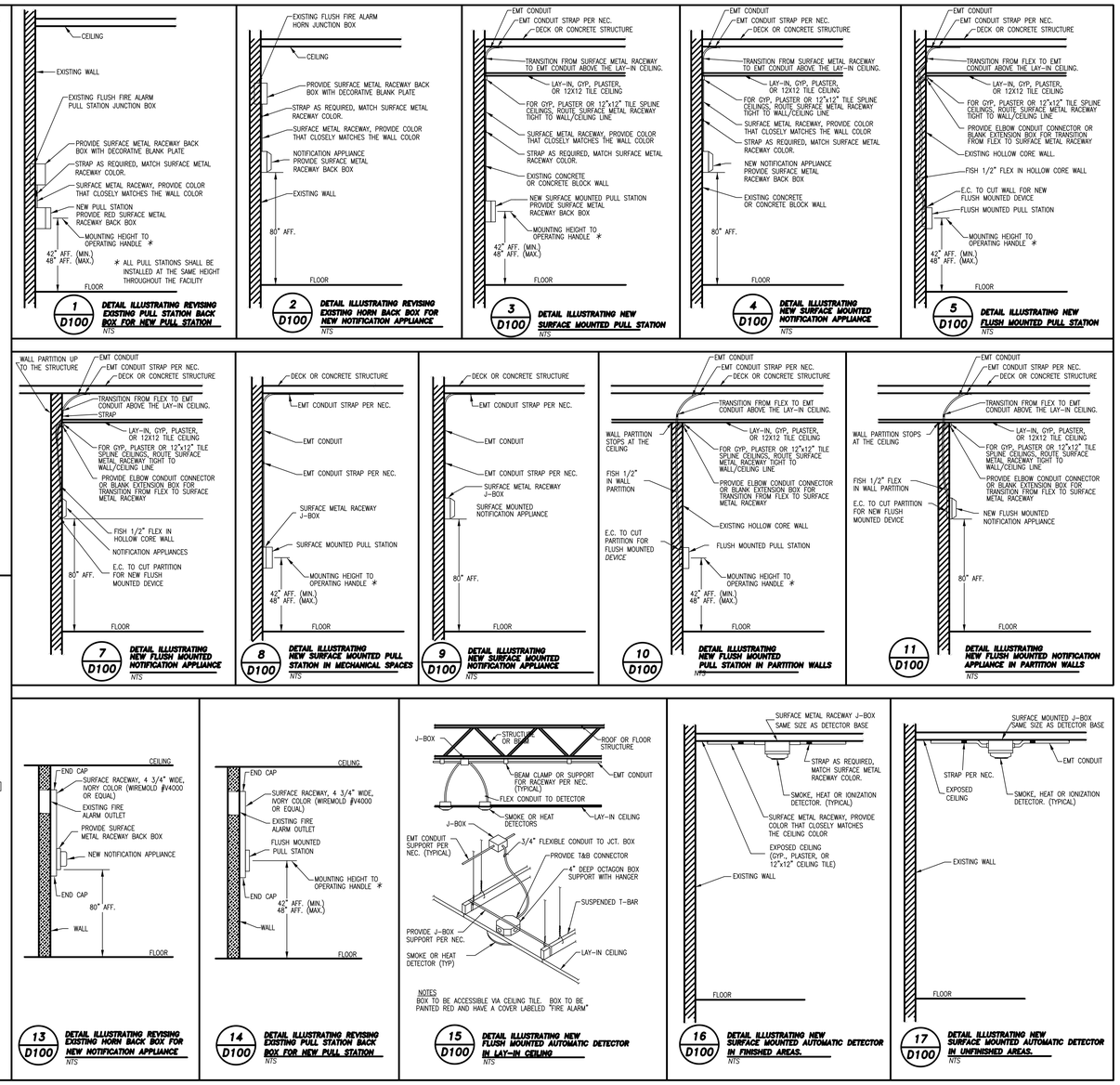
6 / D100 TYPICAL ELEVATOR SMOKE DETECTOR DETAIL
NTS

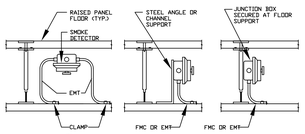


NOTES:
THIS IS A COMPREHENSIVE DETAIL/RISER. ALL EQUIPMENT SHOWN ON THIS RISER MAY NOT APPLY. SEE FLOOR PLANS AND SPECIFICATIONS FOR ACTUAL DEVICES AND EQUIPMENT REQUIRED.

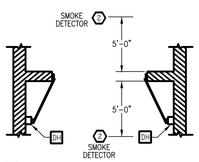
1. E.O.L. = END OF LINE RESISTOR
2. HWD = SPRINKLER, DOOR CLOSURES (SENTRONIC)
3. MOUNT ANNUNCIATOR 60" AFF TO CENTER.
4. R.A. = RETURN AIR

12 / D100 TYPICAL ADDRESSABLE FIRE ALARM SYSTEM RISER
NTS





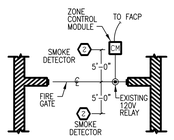
25 / D100 TYPICAL RAISED FLOOR SMOKE DETECTOR MOUNTING DETAIL
NTS



NOTES:

1. DOUBLE DOOR SHOWN, SINGLE DOORS SIMILAR, EXCEPT ONLY ONE MAGNETIC DOOR HOLDER.
2. ALL EXPOSED WIRING IN SURFACE METAL RACEWAY. USE ONLY IF THE WALLS ARE SOLID CONCRETE.
3. PROVIDE ALL FLUSH MOUNTED OUTLET BOXES WHERE WALL IS NEW OR WALL IS HOLLOW (E.G. CONCRETE BLOCK) AND CAN BE FINISHED.
4. WIRE INTO FIRE ALARM SYSTEM.
5. DH MAGNETIC DOOR HOLDER
6. PROVIDE FLOOR MOUNTED DH MAGNETIC DOOR HOLDER WHERE INDICATED ON THE FLOOR PLANS.
7. ALL DOORS WITH MAGNETIC DOOR HOLDERS ARE TO CLOSE UPON ACTIVATION OF THE BUILDING FIRE ALARM.

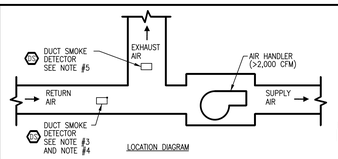
18 / D100 SMOKE DOOR INSTALLATION-EXISTING
NTS



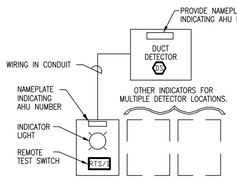
NOTES:

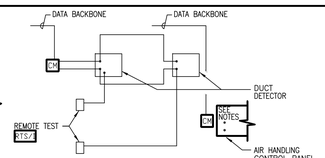
1. ALL EXPOSED WIRING IN SURFACE METAL RACEWAY.
2. CONNECT TO FIRE ALARM SYSTEM.
3. OPERATE BY LOCAL SMOKE DETECTOR ONLY.

19 / D100 SMOKE ROLL DOWN INSTALLATION DETAIL
NTS



LOCATION DIAGRAM



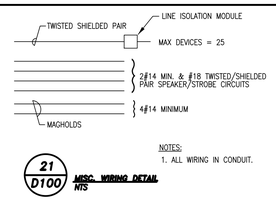


WIRING DIAGRAM

NOTES:

1. WIRE INTO HVAC CONTROL PANEL OR STARTER TO SHUT DOWN AIR HANDLER IN THE EVENT SMOKE IS DETECTED. PROVIDE OVERRIDE SWITCH (KEYED SWITCH OR START PUSH-BUTTON STATION IN LOCKED ENCLOSURE) ADJACENT TO FACP TO RESTART THE HVAC UNIT. PROVIDE WRITTEN STATEMENT TO DFD CONSTR. REP. THAT THE SYSTEM WAS TESTED AND OPERATES CORRECTLY.
2. MOUNT REMOTE TEST STATION ON NEAREST WALL THAT PROVIDES ACCESS. IN INSTALLATIONS WHERE TWO OR MORE AHU'S ARE INSTALLED TOGETHER, MOUNT ALL TEST SWITCHES IN ONE AREA.
3. DUCT SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS WITH A CAPACITY GREATER THAN 2,000 CFM, IN THE RETURN AIR DUCT OR PLENUM UPSTREAM OF ANY FILTERS, EXHAUST AIR CONNECTIONS, OUTDOOR AIR CONNECTIONS, OR DECONTAMINATION EQUIPMENT AND APPLIANCES.
4. WHERE RETURN AIR RISERS SERVE TWO OR MORE STORIES AND ARE PART OF A RETURN AIR SYSTEM HAVING A CAPACITY GREATER THAN 15,000 CFM, DUCT SMOKE DETECTORS SHALL BE INSTALLED AT EACH STORY. SUCH DUCT SMOKE DETECTORS SHALL BE LOCATED UPSTREAM OF THE CONNECTION BETWEEN THE RETURN AIR RISER AND ANY AIR DUCTS OR PLENUMS.
5. FOR HIGH RISE BUILDINGS, IN ADDITION TO THE DUCT SMOKE DETECTOR IN THE MAIN RETURN AIR DUCT, PROVIDE A DUCT SMOKE DETECTOR IN THE EXHAUST AIR PLENUM OF EACH A/C SYSTEM HAVING A CAPACITY GREATER THAN 2,000 CFM.
6. THE ACTUATION OF A DUCT SMOKE DETECTOR SHALL ACTIVATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION (CAMPUS POLICE AND SECURITY).

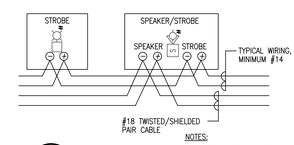
20 / D100 AIR HANDLING SHUTDOWN DETAIL
NTS



NOTES:

1. ALL WIRING IN CONDUIT.

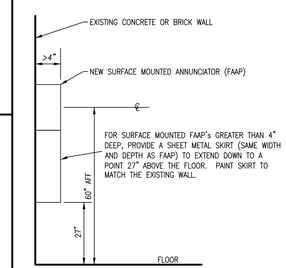
21 / D100 MISC. WIRING DETAIL
NTS



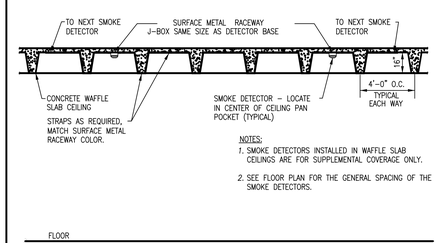
NOTES:

1. ALL WIRING IN CONDUIT.

22 / D100 SPEAKER/STROBE WIRING DETAIL
NTS



23 / D100 SURFACE ANNUNCIATOR MOUNTING DETAIL
NTS



NOTES:

1. SMOKE DETECTORS INSTALLED IN WAFFLE SLAB CEILINGS ARE FOR SUPPLEMENTAL COVERAGE ONLY.
2. SEE FLOOR PLAN FOR THE GENERAL SPACING OF THE SMOKE DETECTORS.

24 / D100 TYPICAL SMOKE DETECTOR MOUNTING DETAIL FOR WAFFLE SLAB AREAS
NTS

State of Wisconsin
Department of Administration
Division of Facilities Development

Fire Alarm Symbols and Details

Revisions:

No.	Date:	By:	Description:

Plotting Scale	1" = 76 Drawing Units
Sheet Size	30" X 42"
DFD Number	N/A
Set Type	N/A
Date Issued	02/01/2021
Sheet Number	D100