REVISIONS:

CHECKED BY:

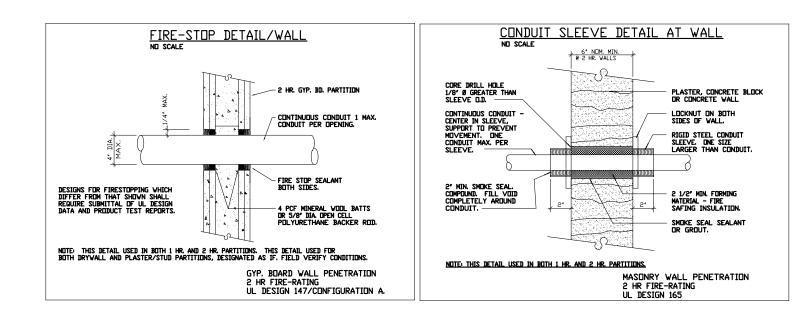
7 OF: 8

CONDUIT FIRE STOPPING DETAIL NO SCALE

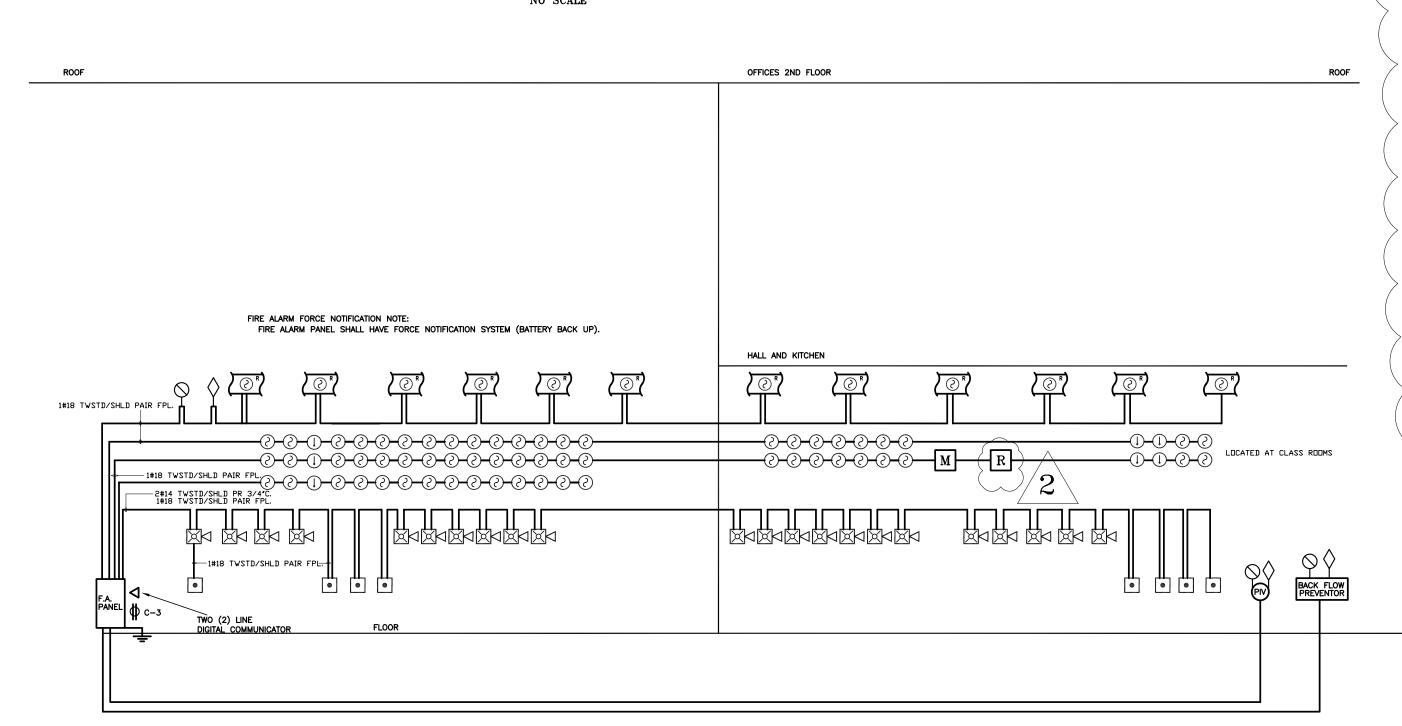
| Penetrating Item Metal Pipe | Concrete | | | | Gypsum | | Wood Floor/Ceiling | |
|------------------------------|----------|---------------|-----|------------------|--------|---------------|--------------------|---------------|
| | 49 | CP 25N/S, S/L | 170 | FD150 | 147 | CP 25 | 159 | CS195, CP 25 |
| | 63 | 7900 Kit | 202 | Mold. Putty | 322 | CP 25WB | | E5A |
| | 93 | CS195, FS195 | 233 | CS195, | 328 | CP 25N/S, S/L | 169 | CP 25N/S, S/L |
| | | FS195, CP 25 | | CP 25 | 569 | FD150 | 453 | CP 25WB |
| | 94 | CP 25N/S, S/L | 234 | CS195 | 570 | CS195 | | |
| | 95 | FS195 | | CP 25N/S, S/L | | FS195 | | |
| | 137 | CS195 | | or Putty | | CP 25WB | | |
| | | CP 25N/S, S/L | 319 | CP 25WB | | | | |
| | 138 | CS195 | | CP 25WB | | | | |
| | | CP 25N/S, S/L | 337 | CP25N/S, S/L | | | | |
| | 160 | FD150 | 395 | CP 25 | | | | |
| | | | | CP 25WB FS195 | | | | |

Underwriters Laboratories, Inc., Fire Resistance Directory

3M FIRE STOP SYSTEMS 1992 UL DIRECTORY



PENETRATION DETAILS NO SCALE



FIRE ALARM RISER DIAGRAM

FIRE ALARM NOTES:

- FIRE ALARM EQUIPMENT SHALL BE BY SEPARATE CONTRACT. SUBMIT SHOP DRAWINGS APPROVAL. (COST OF CONTRACT BY GENERAL CONTRACTOR)
- NEW EQUIPMENT INCLUDING WIRING AND RACEWAYS SHALL CONFORM TO N.F.P.A. 72, AND 101, S.F.B.C., A.D.A. CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
- 3. ALL NEW COMPONENTS SHALL BE U.L. APPROVED EQUAL TO SIEMENS BUILDING TECHNOLOGIES.
- 4. ALL EQUIPMENT SHALL BE AS MANUFACTURED BY "SIEMENS",
- 5. FIRE ALARM SYSTEM IS POWER LIMITED (ADDRESABLE).
- 6. SET ALL ITEMS TO COMPLY WITH A.D.A.

FIRE ALARM LEGEND:

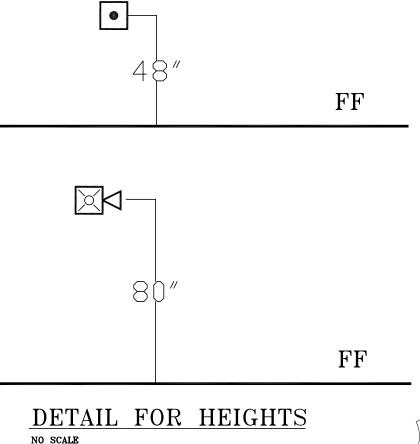
- (2) SIEMENS HFP-11 ADDRESSABLE SMOKE DETECTOR
- (1) SIEMENS HFPT-11 ADDRESSABLE HEAT DETECTOR
- SIEMENS MODEL NO. SEF-MC SPEAKER/STROBE
- SIEMENS HMS ADDRESSABLE PULL STATION
- SIEMENS AD2-P WITH HFP-11 SMOKE DETECTOR SIEMENS HTRI-R ADDRESSABLE RELAY DUCT SMOKE DETECTOR AND AHU SHUTDOWN RELAY
- FLOW SWITCH
- TAMPER SWITCH
- SIEMENS HTRI-S ADDRESSABLE SINGLE INPUT CONNECTED TO KITCHEN HOOD
- R SIEMENS HTRI-R ADDRESSABLE RELAY TO MUTE SOUND SYSTEM
- SIEMENS XLSV ADDRESABLE FIRE ALARM PANEL
- ANN SIEMENS MODEL SSD ANNUNCIATOR PANEL

NOTES:

- FIRE ALARM AND LIFE SAFETY SYSTEM DEVICES, WHEN APPLICABLE, REFER TO SEPARATE LEGEND 2. FOR DESCRIPTION.
- THIS IS A STANDARD LEGEND FOR GENERAL USE, SEVERAL SYMBOLS SHOWN MAY NOT BE USED ON PLANS. ADDITIONAL SYMBOLS WHICH DO NOT APPEAR 3. ON THIS LEGEND ARE DESCRIBED ON PLANS.
- COORDINATION NOTE: EXACT LAYOUT OF RECEPTACLES & COMBINATION OF DATA/TELEPHONE OUTLETS MUST BE COORDINATED AND APPROVED BY ARCHITECT PRIOR TO COMMENCEMENT OF ROUGH ELECTRICAL.
- U.L. LISTING: ALL SYSTEM DEVICES AND PANELS SHALL BE U.L.
 5. LISTED FOR THEIR INTENDED USE AND AS A COMPATIBLE SYSTEM.
- ELECTRICAL SUPERVISION: COMPLETE SYSTEM TO BE FULLY, ELECTRICALLY SUPERVISED. ANY DISARRANGEMENT OF THE SYSTEM WIRING, REMOVING OF DEVICES OR LOSS OF NORMAL A.C. POWER SHALL CAUSE THE SYSTEM TROUBLE SIGNAL TO SOUND AT THE REMOTE TROUBLE INDICATOR.
- BATTERY STANDBY: LOSS OF NORMAL A.C. POWER SHALL, IN ADDITION TO SOUNDING THE TROUBLE SIGNAL, CAUSE THE SYSTEM TO SHIFT TO THE STANDBY BATTERIES.
- CODE COMPLIANCE: SYSTEM TO BE INSTALLED IN ACCORDANCE WITH NFPA 72, 101 AND ADA CODE. SYSTEM WIRING TO COMPLY WITH ART. 760, 250 AND 300 OF NFPA (NEC).
- 9. MOUNTING HEIGHTS: MOUNT PULL STATIONS AT 48" AFF. MOUNT SPEAKER/STROBES AT 80" AFF.
- CONDUCTORS AND RACEWAYS: INITIATING WIRES: 2 CONDUCTOR #18 975 WP EQUAL THHN. HORN CIRCUIT: 2 CONDUCTOR TWISTED SOLID #14 WP994 OR EQUAL STROBE LIGHT CIRCUIT: 2 CONDUCTOR SOLID FPL WP962 OR EQUAL. ALL CONDUCTORS SHALL BE INSTALLED IN EMT. MINIMUM SIZE FOR ALL CONDUITS SHALL BE 1/2". USE COMPRESSION TYPE CONNECTORS AND COUPLINGS WHERE CONDUIT SYSTEM IS EXPOSED TO WEATHER. FPLP WIRING WILL BE ACCEPTABLE WITHOUT CONDUIT WHERE ALLOWED BY CODE. 10. VISUAL ALARM PER ANSI A117.1, 4, 26 AND S.F.B.C. CHAPTER 515.3
- 11. AN ADDRESSABLE RELAY IS PROVIDED TO MUTE THE BUILDING SOUND SYSTEM. WHEN THE FIRE ALARM SYSTEM GOES INTO ALARM THE RELAY SHALL ACTIVATE AND MUTE THE BUILDING SOUND SYSTEM. THE RELAY SHALL BE LOCATED WITHIN 3' OF THE BUILDING SOUND SYSTEM PER NFPA 72.
- 12. THE EVACUATION SOUND LEVEL SHALL BE AT LEAST 15 DB ABOVE THE AVERAGE AMBIENT SOUND LEVEL PER NFPA 72.

PULL STATION SYSTEM OPERATION:

- ACTIVATION OF A MANUAL PULL STATION SHALL:
- A. CAUSE ALL SPEAKERS TO SOUND THROUGHOUT THE BUILDING. B. CAUSE ALL STROBE LIGHTS TO FLASH THROUGHOUT THE BUILDING. C. INDICATE THE ZONE OF ALARM AT THE FIRE ALARM CONTROL PANEL (FACP).
 - A/C UNIT SMOKE DETECTOR NOTES:
 - AUDIBLE AND VISIBLE ALARM WITH AUDIBLE AND VISUAL CONTROL TROUBLE ALARM UPON ACTIVATION.
 - 2. DUCT MOUNTED SMOKE DETECTORS SYSTEM SHALL BE FURNISHED AND INSTALLED IN DUCT BY HVAC CONTRACTORS, AND WIRED BY ELECTRICAL CONTRACTOR.
 - 3. CONTRACTOR SHALL CONNECT A/C DETECTORS TO BUILDING FIRE ALARM IF SO REQUIRED BY MARSHALL.



(SEE NOTE #8 ON THIS SHEET)

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DESIGN - INSPECTIONS