PARTIAL FIRST FLOOR PLAN – RENOV. – LIFE SAFETY

1/4" = 1'-0" LS-101 / 3,465 SQ. FT.

Floor Plan Labels

- A147M EXAM
- A147K EXAM
- A147H EXAM
- A147F EXAM
- A147C EXAM
- OFFICE
- A147B WAITING ROOM
- A147N EXAM
- PROCEDURE ROOM 112
- TOILET 112.1
- STAFF TOILET 110
- EXAM ROOM 109
- OFFICE
- UTILITY SOILED 113
- A116B MEN'S TOILET
- UTILITY CLEAN 111
- EXAM ROOM 114
- EXAM ROOM 108
- E1 15 ELECTRIC CLOSET
- E1 14 ELECTRIC CLOSET
- A149A OFFICE
- LIMITED WORK IN THESE ROOMS AS REQ'D FOR MEP WORK.
- A149 VOLUNTEER SERVICE REGISTRATION SIGN-IN
- E1 15A ELECTRIC CLOSET
- ASSESSMENT CUBICAL 118
- STORAGE 107
- TOILET 106.1
- CLINICAL OFFICE 105
- RECEPTION 103
- ALCOVE 104
- TOILET 101
- C1 8 CORR.
- TOILET 114.1
- MEDS 115
- HALLWAY 120C
- HALLWAY 120B
- ASSESSMENT CUBICAL 119
- EXAM ROOM 106
- A116A MALE LOCKER ROOM
- EXAM ROOM 116
- HALLWAY
- EXAM ROOM 117
- EXAM ROOM 121
- EXAM ROOM 122
- CLINICAL OFFICE 122
- CLINICAL OFFICE 123
- FAMILY WAITING AREA 102
- GENERAL WAITING AREA 100
- FINAL SUBMITTAL

PHASE I   PHASE II

PLAN LEGEND

- AREA OF WORK
- EXISTING WALL TO REMAIN.
- EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN.
- NEW WALL CONSTRUCTION
- NEW DOOR, FRAME, AND HARDWARE
- NO WORK IN THESE AREAS.
- SMK — 30-MIN. RATED SMOKE BARRIER
- 1HR — 1-HOUR. RATED WALL CONSTRUCTION
- 2HR — 2-HOUR. RATED WALL CONSTRUCTION
- EXIT ACCESS CORRIDOR CONSTRUCTED TO LIMIT PASSAGE OF SMOKE (19.3.6). NO OPENING RATINGS (19.3.6.3.1–EXCEPTION).
- MEANS OF EGRESS PATH
- F.E. FIRE EXTINGUISHER
- EXIT LIGHT
- LIMITED WORK IN THESE ROOMS AS REQUIRED FOR MEP WORK. REFER TO MEP DRAWINGS.

KEYED NOTES

1. FIRE EXTINGUISHER CABINET, SEE DETAIL G / A-601

System No. W-L-2299
May 19, 2005
F Ratings - 1 & 2 Hr (See Item 1)
T Rating - 0 Hr

SECTION A-A

1. **Wall Assembly** - The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 mm by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. wide (89 mm) spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board** - The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 3-1/2 in. (89 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrants** - One nonmetallic pipe or conduit installed eccentrically or concentrically within opening. Annular space between penetrant and periphery of opening to be min 0 in. (point contact) to max 1-1/8 in. (0 mm to max 29 mm). Penetrant to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:
   A. **Polyvinyl Chloride (PVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
   B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
   C. **Rigid Nonmetallic Conduit+** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).
   D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** - Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   E. **Electrical Nonmetallic Tubing (ENT)+** - Nom 1-1/4 in (32 mm) diam (or smaller) ENT installed in accordance with Article 331 of the National Electrical Code (NFPA No. 70).

See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Materials Directory for names of manufacturers.

3. **Fill,Void or Cavity Material** - Caulk or Sealant - Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall.

3M COMPANY - IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant (Note: CP 25WB+ not suitable for use with CPVC pipes.)

*Bearing the UL Classification Marking
+Bearing the UL Listing Mark

System No. W-L-4003
November 05, 2010
F Ratings — 1 and 2 Hr (See Item 1B)
T Rating — 0 and 1/2 Hr (See Item 1B)

SECTION A-A

1. **Wall Assembly** — The 1 or 2 h fire-rated gypsum wallboard/stud assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC. Additional framing members to be installed in stud cavity containing the throughpenetrating item to form a rectangular box around the penetrant.
   B. **Gypsum Board** — One or two layers of nom 5/8 in. thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max area of opening is 160 sq in. with max dimension of 20 in. Max width of opening in wood stud walls is limited to 14-1/2 in. The hourly F Rating the firestop system is equal to the hourly fire-rating of the wall assembly in which it is installed. In 1 h fire-rated wall assemblies, the T Rating is 0 h. In 2 h fire-rated wall assemblies, the T Rating is 1/2 h.

2. **Cable Tray** — Max 18 in. wide by 6 in. deep open ladder cable formed from No. 16 MSG (0.060 in.) thick galv steel with 1 in. wide by 3/4 in. deep galv steel rungs spaced 9 in. OC, or max 18 in. wide by 4 in. deep open ladder aluminum tray formed from 0.060 in. thick aluminum with 1 in. wide by 1-7/16 in. deep aluminum rungs spaced 9 in. OC. One cable tray shall be installed in the opening. The annular space between the cable tray the and top and bottom of the opening shall range from 0 in. (point contact) to a max 2 in. The annular space between the cable tray and each side shall be a nom 1 in.

3. **Cables** — Aggregate cross-sectional area of cables in cable tray to be max 30 percent of the cross-sectional area of the cable tray based on a max 3 in. cable loading depth within the cable tray. The max cable loading within the cable tray is dependent upon the depth of the cable tray (Item 2). For cable trays having a depth of 4 in. or less, the max cable loading depth is 30 percent. For cable trays having a depth greater than 4 in., the max cable loading is 18 percent. Any combination of the following types and sizes of copper conductor cables may be used:
   A. Max 1/C No. 300 kcmil cable with cross-linked polyethylene (XLPE) jacket.
   B. Max 7/C No. 12 AWG cable with polyvinyl chloride (PVC) or XLPE insulation and PVC jacket.
   C. Max 100 pair No. 24 AWG cable with PVC insulation and jacket.

4. **Firestop System** — The firestop system shall consist of the following:
   A. **Steel Channel** — "C" shaped channel field fabricated from min No. 30 MSG (0.016 in.) thick galv sheet steel. Channel shall consist of two min 3 in. wide by 6 in. long flange and a min 5 in. deep by 6 in. wide web. The channels shall be fitted against each side of the opening. Each flange shall be secured to the steel studs on both surfaces of the wall by means of 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws and 1/4 in. by 1-1/2 in. diam steel fender washers, spaced 4 in. OC.
   B. **Fill, Void or Cavity Material** — Pillows — Max 9-1/2 in. long by 8 in. wide by 2-1/4 in. thick plastic covered intumescent pillows. Pillows to be installed with 9-1/2 in. dimension projecting through wall and centered within the opening of the wall assembly. Pillows tightly packed into opening to fill the annular space between cables and periphery of opening and between cable tray and periphery of opening. EGS NELSON FIRESTOP — Type PLW Pillows
   C. **Fill, Void or Cavity Material** — Putty — (Not Shown) — After installation of the pillows (Item 4B), putty shall be applied to seal any voids between the cables and the pillows and between the cable tray and the pillows on both sides of wall assembly. EGS NELSON FIRESTOP — Type FSP Putty
   D. **Wire Lath** — Nom 2 in. hexagonal shaped wire lath fabricated from min No. 19 SWG (0.041 in.) galv steel wire. Wire lath cut to fit the contour of the opening with a min 3 in. lap beyond the periphery of the opening to keep the pillows in place. Wire lath secured to both surfaces of wall assembly by means of 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws and 1/4 in. by 1-1/2 in diam steel fender washers, spaced 6 in. OC.

System No. W-L-7091
May 19, 2005
F Ratings - 1 & 2 Hr (See Item 1)
T Rating - 0 Hr

SECTION A-A

1. **Wall Assembly** - The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** - Wall framing shall consist of steel channel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Additional 3-1/2 in. (89 mm) wide steel studs shall be used to completely frame opening.
   B. **Gypsum Board** - Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Max size of opening to be 48 in. (1219 mm) wide by max opening dimension of 32 in. (813 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Steel Duct** - Nom 30 in. by 18 in. (762 mm by 457 mm) (or smaller) No. 24 gauge (or heavier) galv steel duct installed concentrically or eccentrically within opening. Annular space between duct and periphery of opening to be min 0 in. (point contact) to max 2 in. (0 mm to max 51 mm). Duct to be rigidly supported on both sides of wall assembly.

3. **Firestop System** - The firestop system shall consist of the following:
   A. **Fill,Void or Cavity Material** - Caulk or Sealant - Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall.

3M COMPANY - CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant

   B. **Retaining Angles** - Min 16 gauge galv steel angles sized to lap duct a min of 2 in. (51 mm) and lap wall surfaces a min of 1 in. (25 mm). Angles attached to duct on both sides of wall with min 1/2 in. (13 mm) long No. 10 (or larger) sheet metal screws spaced a max 1 in. (25 mm) from each end and spaced a max 6 in. (152 mm) OC.

*Bearing the UL Classification Marking

BUILDING 1

REVIEWED FOR GENERAL COMPLIANCE WITH NFPA 101 LIFE SAFETY CODE 2015 EDITION

OCCUPANCY: EXISTING HEALTH CARE, CH. 19

SPRINKLER SYSTEM: FULLY SPRINKLERED W/ MINOR EXCEPTIONS. –QUICK RESPONSE HEADS THROUGHOUT MAJORITY OF FACILITY

BUILDING HEIGHT: 150'-0" (APPROX.)

NO. OF STORIES: 14 + BASEMENT

GROSS FLOOR AREA: 866,000 SQ. FT. (APPROX.)
WORK AREA: 3,465 SQ. FT.

WORK: FIRST FLOOR (WOMEN'S CLINIC) DEMOLITION AND INTERIOR CONSTRUCTION.

MEANS OF EGRESS

ARRANGEMENT OF EGRESS MEANS

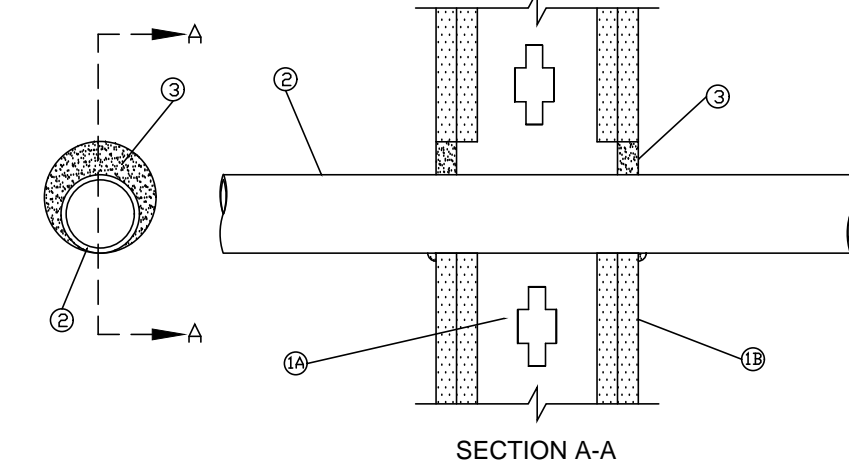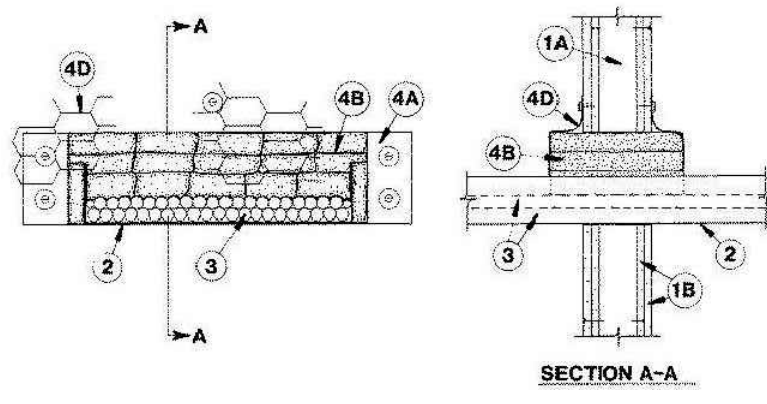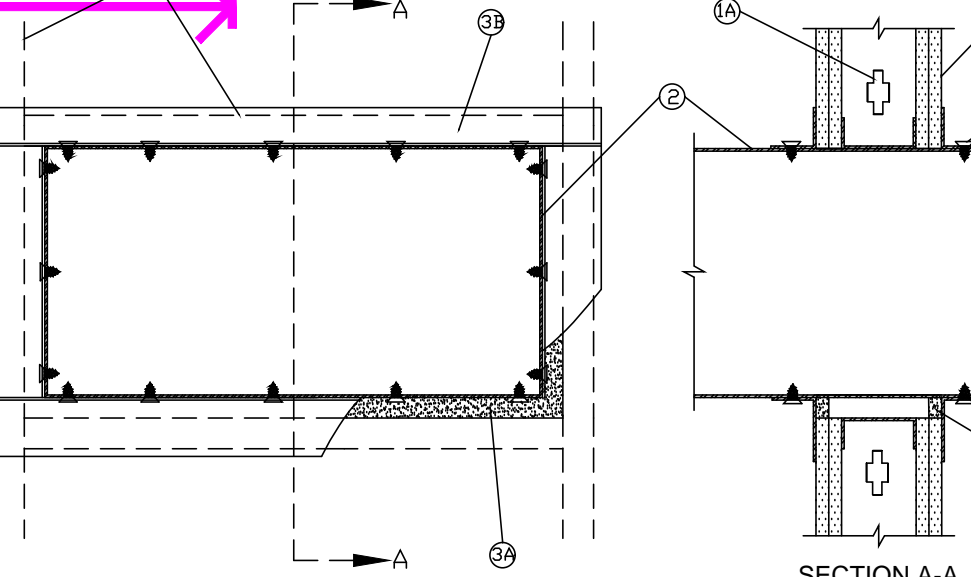|	MAX. ALLOWED	CODE REF.	PROVIDED
DISTANCE FROM ROOM TO AN EXIT.	200'	19.2.6.2.2 19.2.5.7.3.4(B)(2) 39.2.6.2	70' (TO CORR. C1-9
DISTANCE TO SMOKE COMPARTMENT DOOR.	200'	19.3.7.1	112' TO C1-8
DISTANCE FROM SLEEPING ROOM DOOR TO CORRIDOR.			N/A
COMMON PATH OF TRAVEL	50'	JT. COMM. CH 13 S 03.01.20, EP 12	<35'
DEAD END CORRIDOR.	50'	JT. COMM. CH 13 S 03.01.20, EP 11	N/A
DISTANCE THROUGH INTERVENING ROOMS	(1) RM. TO EXIT:100 (2) RM. TO EXIT:50'	FBC 1014.2.4.3 FBC 1014.2.4.4	<60' N/A
DISTANCE TO FIRE EXTINGUISHER.	75'	NFPA 10, 3-2.1	50'

FIRST FLOOR, Building 1

SMOKE ZONE	SQUARE FEET	OCCUPANTS			EXIT WIDTH (INCHES)		
		FACTOR	LOAD	RATIO	REQ'D	PROVIDED	
A3, AND A4	3,465	100	35	0.2	7.0	76	

PROTECTION

FIRE RESISTANT RATED ASSEMBLY.	MIN. RATING	CODE REF.	NOTE
FLOOR CONSTRUCTION (EXISTING).	2-HR	NFPA 220	N/A
FLOOR PENETRATIONS	90 MIN.	NFPA 90A	FIRE SEALANT
VERTICAL EXIT ENCLOSURES	1-HR	7.1.3.2.1 (3)B	N/A
VERTICAL EXIT ENCLOSURES DOORS	45 MIN.	T8.3.4.2	N/A
SMOKE BARRIERS	1/2-HR, SMOKE DAMPERS	19.3.7.3 19.3.7.3 (2)	1-HR FIRE SEALANT AT PENETRATIONS
SMOKE BARRIER DOORS	20 MIN.	19.3.7.1	
SMOKE DAMPERS	1-HR	19.2.2.7 7.1.3.2 7.2.6.3	DAMPERS. 1-HR FIRE SEALANT AT CONDUIT, PIPE & WIRE PENETRATIONS
EXIT PASSAGEWAYS	1-HR	T8.3.4.2	PROVIDED
EXIT PASSAGEWAY DOORS	45 MIN.	T8.3.4.2	PROVIDED
CORRIDORS	SMOKE RESISTANT	19.3.6.2	WALLS, CEILINGS AT C1-9 AND C1-8
CORRIDOR DOORS	SMOKE RESISTANT	19.3.6.3	PROVIDED

HAZARD PROTECTION

AREAS	MIN. RATING	CODE REF.	NOTE
HAZARDOUS AREAS	1–HR OR SPRINKLERS	19.3.2.1 19.3.5.9	N/A
LABORATORIES WITH SEVERE HAZARDS PER AHJ	1–HR & SPRINKLERS	8.7, NFPA 99	N/A
ANESTHETIZING LOCATIONS	1–HR & SPRINKLERS	8.7, NFPA 99	N/A
MEDICAL GAS STORAGE	1–HR & SPRINKLERS	8.7, NFPA 99	N/A
COOKING FACILITIES	N/A	9.2.3 NFPA 96	N/A