

in Light Hazard Occupancies Only (SSU/SSP).

Obstruction  $A \ge (D - 8 \text{ in.}) + B$ [ $A \ge (D - 200 \text{ mm}) + B$ ] Wall where: *D* ≤ 30 in. (750 mm) (Obstruction in horizontal ori **Elevation View** 

FIGURE 8.6.5.1.2(b) Obstruction Against Wall (SSI

	$A \le 24$ in. (600 mm) (Use dimension <i>C</i> or <i>D</i> , whicheve						
SU/SSP).	FIGURE 8.6.5.2.1.3(b) Minimum Distation in the Horizontal Orientation (SSU						

HANGER SPACING TABLE												
NOMINAL PIPE SIZE	3⁄4"	1"	1¼"	1½"	2"	21⁄2"	3"	3½"	4"	5"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	N/A	12-0	12-0	15–0	15–0	15–0	15–0	15-0	15-0	15-0	15–0	15–0
THREADED LIGHTWALL STEEL PIPE	N/A	12-0	12-0	12-0	12-0	12-0	12-0	N/A	N/A	N/A	N/A	N/A
COPPER TUBE	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A	N/A	N/A

15½ (395)

18 (450)

Ceiling or roof

More than 24 in. (600 mm) to

More than 30 in. (750 mm)

For SI units, 1 in. = 25.4 mm.

Obstruction

<24 in. (600 mm) max →

Wall

No additional

protection is required

Note: For A and B, refer to Figure 8.6.5.2.2.

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lo maximum

FIGURE 8.6.5.1.2(c) Obstructions Against Walls (SSU/SSP).

30 in. (750 mm)

# ER AREA:

<u> </u>	K AKEA:				
CODE S	SUMMARY				
PROJECT CONSTRUCTION PURPOSE	Renovating existing offices into 3 new exam rooms for the ED.				
<u>OWNER:</u> Saint Luke's East Hospital 120 NE Saint Luke's Blvd Lee's Summit, MO 64063					
DESIGNER: ACI BOLAND ARCHITECTS 1710 WYANDOTTE ST. KANSAS CITY, MO 64108 PHONE: (816) 763-9600					
LOCAL AUTHORITY: RESPONDING FIRE SERVICE: CITY OF L LOCAL BUILDING INSPECTION: CITY OF					
2010 ADA STANDARDS FOR ACCESSIBL STATE OF MISSOURI DEPT. OF HEALTH CODES: 2012 NFPA 101 LIFE SAFETY CODE (LSC	PA 70) APTER 20) O ADOPTED BY THE CITY OF LEE'S SUMMIT E DESIGN / AMERICANS WITH DISABILITIES ACT OF 1990 & ENVIRONMENT REFERENCES THE FOLLOWING				
	AP, THE MOST STRINGENT SHALL APPLY				
TYPE OF CONSTRUCTION:	TYPE 1-A -SECTION 602.2 (TYPE 1 - 332 SPRINKLERED - SECTION 18.1.6.1)				
OCCUPANCY GROUP:	I-2 -SECTION 308.3 (HEALTHCARE - SECTION 6.1.5)				
OCCUPANT LOAD: TOTAL SQUARE FOOTAGE: SF / = TOTAL NUMBER OF OCCUPANTS =	785SF 6				
DEAD END CORRIDOR LENGTH LIMIT:	50'				
EXIT ACCESS TRAVEL DISTANCE:	EXIT ACCESS TRAVEL DISTANCE: 200'				
AREA OF CONSTRUCTION:	785+/- SF				
REQUIRED FIRE RESISTANCE RATINGS PER NFPA 101 A.8.2.1.2:	(IN HOURS)				
EXTERIOR BEARING WALLS INTERIOR BEARING WALLS PRIMARY STRUCTURAL FRAME FLOOR CONSTRUCTION ROOF CONSTRUCTION INTERIOR NON-BEARING WALLS	3 HR 3 HR 3 HR 2 HR 1 1/2 HR 0 HR				
PLUMBING FIXTURE CALCULATIONS:	EXISTING TO REMAIN NO CHANGE IN OCCUPANCY				
	M SYSTEM IS SPECIFIED AS AN ADDRESSABLE TYPE TIONS ARE PER THE APPLICABLE CODES AS WELL AS				
A SMOKE OR COMBINATION FIRE/SMOK DOCUMENTS. THESE DAMPERS WILL C	WORK PENETRATING SMOKE RATED WALLS WILL HAVE THE DAMPER AS INDICATED ON CONSTRUCTION LOSE UPON DETECTION OF SMOKE BY THE AREA DETECTORS IN THE AIR HANDLING UNITS.				
- FIRE SPRINKLER SYSTEM - SPECIFIED SPECIFIED TO BE QUICK RESPONSE TY	TO BE PER NFPA 13. THE SPRINKLER HEADS ARE PE.				
	EMERGENCY LIGHTING, LIFE SAFETY AND CRITICAL BACKUP GENERATOR LOCATED OUTSIDE THE MAIN				

#### ELECTRICAL ROOM. - ILLUMINATED EXIT SIGNS

PASSIVE FIRE SAFETY FEATURES:

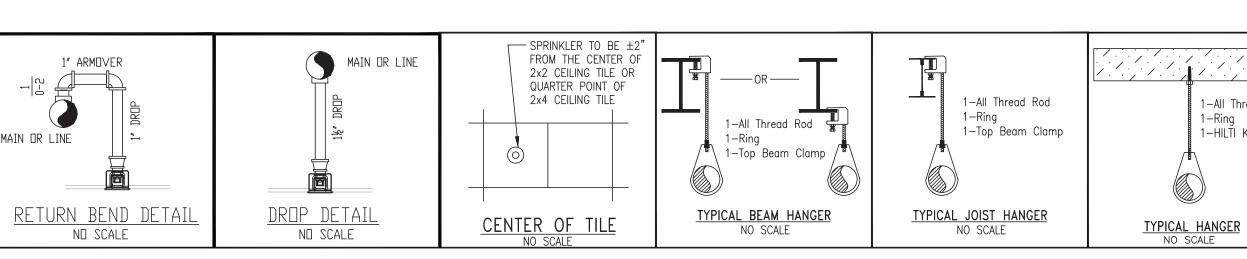
- SMOKE COMPARTMENTS NO GREATER THAN 22,500 SF

### Obstructions to Discharge [Standard Spray Upright/Standard Spray Pendent (SSU/SSP)] Maximum Allowable **Distance of Deflector Above** Distance from Sprinklers to Bottom of Obstruction (B) Side of Obstruction (A) [in. (mm)] 0(0)Less than 1 ft (300 mm)1 ft (300 mm) to less than 1 ft $2\frac{1}{2}$ (65) 6 in. (450 mm) 1 ft 6 in. (450 mm) to less than 31⁄2 (90) 2 ft (600 mm) 2 ft (600 mm) to less than 2 ft5½ (140) 6 in. (750 mm) Open or wood $\leftarrow D \rightarrow$

her standards specify greater clearance to	2  ft  6 (750  mm)  in. to less than	7½ (190)					
they shall be followed.	3 ft (900 mm) 3 ft (900 mm) to less than 3 ft	9½ (240)					
	6 in. (1.1 m) 3 ft 6 in. (1.1 m) to less than	12 (300)					
	4 ft (1.2 m) 4 ft (1.2 m) to less than 4 ft 6 in. (1.4 m)	14 (350)					
	4 ft 6 in. $(1.4 \text{ m})$ to less than 5 ft $(1.5 \text{ m})$	161⁄2 (420)					
	5 ft (1.5 m) to less than 5 ft 6 in. (1.7 m)	18 (450)					
Ceiling	5 ft 6 in. (1.7 m) to less than 6 ft (1.8 m)	20 (510)					
Open web steel	6 ft (1.8 m) to less than 6 ft 6 in. (2.0 m)	24 (600)					
or wood truss	6 ft 6 in. (2.0 m) to less than 7 ft (2.1 m)	30 (750)					
A	7 ft (2.1 m) to less than 7 ft 6 in. (2.3 m)	35 (875)					
	For SI units, 1 in. = 25.4 mm; 1 ft = 0.3048 m. Note: For <i>A</i> and <i>B</i> , refer to Figure 8.6.5.1.2(a).						
< <u>D</u> >							
Elevation View of Truss struction in horizon:al orientation)	Ceiling						
$A \ge 3C$ or $3D$ $A \le 24$ in. (600 mm) mension <i>C</i> or <i>D</i> , whichever is greater)							
.3(b) Minimum Distance from an Obstruc- ntal Orientation (SSU/SSP).	В						
		Obstruction					
	<b>«</b> А	<b>→</b>					

FIGURE 8.6.5.1.2(a) Positioning of Sprinkler to Avoid Obstruction to Discharge (SSU/SSP).

**Elevation View** 



## GENERAL NOTES:

ALL FITTINGS CONFORM TO SECTION 2-4 OF NFPA PAMPHLET 13.

VALVES ON CONNECTIONS TO WATER SUPPLIES, SECTIONAL CONTROL VALVES AND OTHER VALVES IN SUPPLY PIPES TO SPRINKLERS SHALL BE SUPERVISED OPEN BY AN APPROVED METHOD.

IT IS THE OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAT TO KEEP THE SPRINKLER SYSTEM FROM FREEZING.

ALL ELECTRICAL WIRING OF ALARM BELLS, FLOW SWITCHES AND TAMPER SWITCHES (IF REQUIRED) TO BE DONE BY OTHERS.

THE SPRINKLER SYSTEM TO BE INSTALLED IN ACCORDANCE WITH NFPA 13.

HANGERS TO BE SPACED TO MEET NFPA REQUIREMENTS

PER NFPA 13, SECTION 8.6.3.2.4, WITHIN SMALL ROOMS AS DEFINED IN SECTION 3.3.20, SPRINKLERS SHALL BE PERMITTED TO BE LOCATED NOT MORE THAN 9 FT. FROM ANY SINGLE WALL, AND SPRINKLER SPACING LIMITATIONS OF SECTION 8.6.3 AND AREA LIMITATIONS OF TABLE 8.6.2.2.1(a) SHALL NOT BE EXCEEDED. JFS MAY MODIFY HEADS SHOWN ON THIS DRAWING TO COMPLY WITH THIS RULE.

€ = CENTER LINE OF PIPE BELOW TOP OF STEEL

EL = CENTER LINE OF PIPE ABOVE FINISHED FLOOR

## CONSTRUCTION:

CONCRETE SLAB, CONCRETE BEAMS AND TEES

## PLAN NOTES:

1. ALL CEILING HEIGHTS ARE TO BE 9'-0" UNLESS NOTED OTHERWISE.

- 2. SPRINKLERS WILL BE CENTERED IN CEILING TILES WHERE POSSIBLE YET NEVER ANY CLOSER THAN 6" FROM GRID.
- 3. ALL THREADED PIPING IS TO BE ALLIED "SCHEDULE 40" WITH THREADED CAST IRON FITTINGS.
- 4. ALL GROOVED PIPING IS TO BE SCH. 10 PIPE, ASTM A-795 WITH ROLLED GROOVED ENDS. ALL FITTINGS TO BE IRON GROOVED OR WELDED STEEL OUTLETS.

## CODE NOTE:

8.6.5.2.2.1 IN LIGHT HAZARD OCCUPANCIES, PRIVACY CURTAINS SHALL NOT BE CONSIDERED OBSTRUCTIONS WHERE ALL OF THE FOLLOWING AREA MET: (1) THE CURTAINS ARE SUPPORTED BY FABRIC MESH ON CEILING TRACK. (2) OPENINGS IN THE MESH ARE EQUAL TO 70 PERCENT OR GREATER. (3) THE MESH EXTENDS A MINIMUM OF 22 INCHES DOWN FROM CEILING.

## DESIGN CRITERIA:

BUILDING CODE: SEE CODE SUMMARY

OCCUPANCY: SEE CODE SUMMARY

TYPE OF CONSTRUCTION: SEE CODE SUMMARY

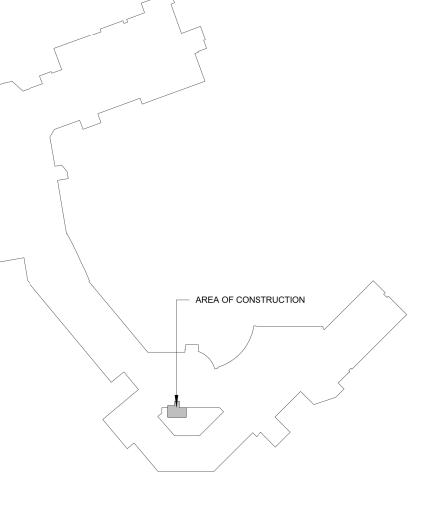
AREA OF CONSTRUCTION: SEE CODE SUMMARY

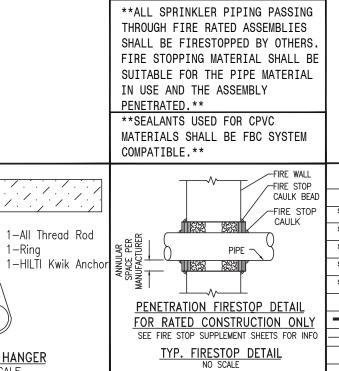
PER NFPA 13, 2016 EDITION:

SYSTEM TYPE: WET (EXISTING)

CORRIDOR, EXAM ROOMS, OFFICES, ETC...

LIGHT HAZARD MAXIMUM 225 S.F. SPRINKLER SPACING (STANDARD SPRINKLER) 100 GPM HOSE ALLOWANCE





NOTE THE DRAWING INDICATES A "SCHEMATIC LAYOUT" SHALL BE FIRESTOPPED BY OTHERS. OF THE SPRINKLER HEADS AND SHOW THE INTENT OF THE DESIGN. EXACT LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES, FIELD VERIFIED, AND INSTALLED TO MEET NFPA 13 COVERAGE REQUIREMENTS FOR THE SPACE.





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				SPRINKLER LEGEND							
RE WALL RE STOP	LEGEND		SYMBOL		SIN #	FINISH	TEMP.	ORIFICE	K-FACT		
ULK BEAD	SYMBOL	DESCRIPTION		ER AREA							
RE STOP AULK	SYMBOL ETR	EXISTING SPRINKLER TO REMAIN		VIKING MIRAGE Q.R. CONCEALED PENDENT	VK462	WHITE	155°	1/2"	5.6		
	SYMBOL R	EXISTING SPRINKLER TO BE RELOCATED/REPLACED	<u> </u>					., =			
	SYMBOL	EXISTING SPRINKLER TO BE ADDED									
	symbol N	NEW SPRINKLER TO BE INSTALLAED	<b> </b>								
	SYMBOL C	SEMI-RECESSED PENDENT TO BE CHANGED TO CONCEALED	<b> </b>						I		
TAIL	•	FIRE SPRINKLER STANDPIPE							<b> </b>		
ONLY		NEW SPRINKLER LINE	<b></b>								
FOR INFO		EXISTING SPRINKLER LINE									
		HANGER LOCATION	1					TOTAL T	HIS SHE		
	Π	PIPE END CAP	1					TOTAL T	HIS JOB		

