

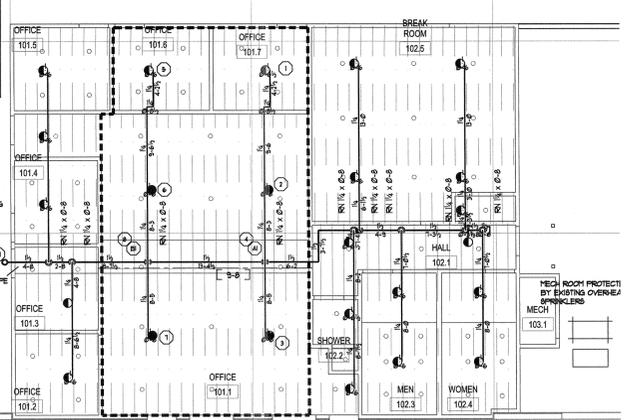
HANGER SPACING TABLE

HANGER SPACING FOR PLASTIC PIPE		HANGER SPACING FOR STEEL PIPE (SCH. 40)	
PIPE SIZE	HANGER SPACING	PIPE SIZE	HANGER SPACING
1/2"	5 1/2'	1", 1 1/4"	12'
3/4"	6'	1 1/2" & LARGER	15'
1"	6 1/2'		
1 1/4"	7'	HANGER SPACING FOR STEEL PIPE (THINWALL)	
1 1/2"	8'	PIPE SIZE	HANGER SPACING
2"	9'	1" - 3"	12'
2 1/2"	10'	4" & LARGER	15'
3"	10'		

SYSTEM DESIGN SUMMARY

CALCULATED AREA AREA 1
 OCCUPANCY OFFICE
 HAZARD LIGHT HAZARD
 AREA 1 SPRINKLER 24/204
 DENSITY 0.10 GPM / SQFT (MAX)
 AREA OF OPERATION 3000 SQFT
 NUMBER OF OPERATING HEADS 4
 SYSTEM DEMAND 15,125 GPM • 84,825 PSI

INSIDE HOSE DEMAND: 1/4" GPM
 OUTSIDE HOSE DEMAND: 100 GPM
 SPRINKLER HEAD: VIKING W334 ECGREG PENDANT
 ORIFICE 3/4"
 K FACTOR 1.0
 TEMPERATURE 160°
 NOTE: AREA REDUCED FOR OR PENDANTS AND CEILING HEIGHT PER NFPA 13
 CALCULATION DATA FILE: AREA 1.WP



11.2.3.2.3 Quick-Response Sprinklers

11.2.3.2.3.1 Where listed quick-response sprinklers, including extended coverage quick-response sprinklers, are used throughout a system or portion of a system having the same hydraulic design basis, the system area of operation shall be permitted to be reduced without revising the density as indicated in Figure 11.2.3.2.3.1 when all of the following conditions are satisfied:

- (1) Wet pipe system
- (2) Light hazard or ordinary hazard occupancy
- (3) 20-ft (6.1-m) maximum ceiling height
- (4) There are no unprotected ceiling pockets as allowed by 8.6.7 and 8.8.7 exceeding 32 ft² (3 m²)

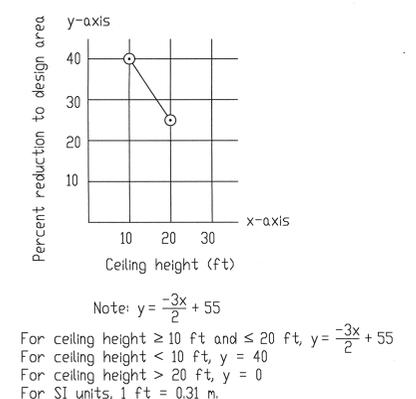


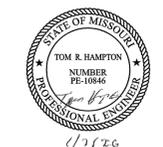
Figure 11.2.3.2.3.1 Design Area Reduction for Quick-Response Sprinklers

DESIGN AREA REDUCTION FOR QUICK-RESPONSE SPRINKLERS

(NFPA 13, 2010 EDITION)

GENERAL NOTES

1. THE SYSTEM DESIGN CRITERIA COMPLIES WITH THE REQUIREMENTS OF NFPA 13 2016 EDITION.
2. ALL PIPING SHALL CONFORM WITH THE REQUIREMENTS OF NFPA 13 2016 EDITION.
3. ALL FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF NFPA 13 2016 EDITION.
4. ALL HANGERS SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13 2016 EDITION.
5. FITTINGS FOR 1" THRU 2" SHALL BE CAST IRON THREADED. FITTINGS FOR 2 1/2" THRU 4" PIPING ARE TO BE GROOVED OR WELDED OUTLETS.
6. LENGTHS OF PIPING 1" THRU 2" ARE SHOWN AS THREAD TO THREAD UNLESS NOTED AS: G - GROOVE OR C - CENTER. 2 1/2" THRU 4" PIPE LENGTHS ARE SHOWN AS CENTER TO CENTER UNLESS NOTED AS: G - GROOVE, W - WELD, F - FACE OR FLANGE OR T - THREAD.
7. ALL SECTIONS OF TRAPPED PIPING SHALL HAVE AUXILIARY DRAINS WHERE REQUIRED.
8. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE HEAT TO PREVENT THE PIPING FROM FREEZING.
9. ALL SWITCHBOARDS, PANEL BOARDS, DISTRIBUTION BOARDS AND MOTOR CONTROL CENTERS SHALL BE PROTECTED FROM DAMAGE BY OTHERS.



TENANT FINISH PLAN

2FOLD
 600 NE MAGUIRE BLVD
 LEE'S SUMMIT, MISSOURI 64064



NOTICE OF NONRESPONSIBILITY

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REVIEWING AUTHORITY	L.S. FIRE DEPT.
HEADS THIS SHEET	31
TOTAL HEADS FOR JOB	31
SCALE	1/8" = 1'-0"
DRAWN BY	MATT KNOX
REVISION DATE	
DATE DRAWN	1/17/25
CONTRACT NUMBER	J-25
DRAWING NUMBER	1 OF 1

CONSTRUCTION: EXISTING CONSTRUCTION
 INSULATED METAL DECK ROOF ON STEEL BEAMS 4 BAR JOIST • ELEV. AS NOTED ON PLAN

PIPE TYPE:
 SCHEDULE 40 AND SMALLER TO BE SCH. 40 PIPE, WELDED 2" AND LARGER TO BE SCH. 40 PIPE.
 PIPING BELOW MEZZANINE TO BE CPVC PIPE

DESIGN CRITERIA:
 PER NFPA 13, LIGHT HAZARD, 0.10 GPM/SQFT FOR 3000 SQFT, OPERATING MAX 225 SOFT/AEAD SPACING, 100 GPM FOR HOSE ALLOWANCE.
 NOTE: REDUCE OPERATING AREA FOR QUICK RESPONSE SPRINKLER HEADS PER NFPA 13.
 ALL SPRINKLERS TO BE QUICK RESPONSE TYPE, APPROVED FOR SPECIFIC OCCUPANCY.

FLOW TEST DATA:

STATIC	125 PSI
RESIDUAL	76 PSI
	2200 GPM

4-19-2024	SYSTEM NOW INCLUDES 80% SAFETY
DATE	REVISION

Symbols

Symbol	Description
○	Hydraulic Reference Points
⊖	Elev. Below Top of Steel
⊕	Elev. Above Finished Floor
⊕	Elev. of Top of Steel
⊕	Ceiling Height
⊕	Denotes Hanger Location
⊕	Rise up or down
—	ALL PIPE CUTS ARE CENTER TO CENTER

Sprinkler Head Summary

Symbol	Count	NPT	Orif.	Make	Model	Finish	Style	Temp.	K	RSN
⊕	34	3/4"	REL	VR	BR485	EXISTING UPRIGHT GFR VELO ECGH	22°	14	RS553	
⊕	1	1/2"	1/2"	VR	BR485	EXISTING HOR. SIDEWALL	22°	5.6	VC593	
⊕	7	3/4"	3/4"	REL	VR	BR485	NEW UPRIGHT GFR VELO ECGH	22°	14	RS553
⊕	20	1/2"	1/2"	VR	GR	CHROPE	OR CHROPE PENDANT w/ CAR REC EBC	200°	5.6	VC302
⊕	4	3/4"	3/4"	VR	EGREG	CHROPE	OR EG PENDANT w/ CAR REC EBC	200°	1.2K	VK34